Introduction The Fifth Technological Wave of the Industrial Age For hundreds of years, the Western We!t's fascination with technology has manifested itself in great waves of wealth that have richly rewarded and continue to reward elites in particular. Twice in modern history, until the beginning of the 20th century, the respective technological center of the Western world changed this location: from Holland in the mid-18th century to England, and from England in the late 19th century to the United States and Germany. In the 1920s, the fourth great technological wave of the industrial age primarily involved automobiles, radio, television, cinema and airplanes. It petered out prematurely in the world stock market crash after 1929 and could only develop in the wake of the Second World War. With its outstanding capabilities in engineering, chemistry, precision instruments and future technologies, Germany was a promising contender for supremacy until the outcome of World War II passed the baton to the Americans in aerospace technology, computers, semiconductors and telecommunications. These areas then defined U.S. technological leadership the rise of its elites and its military preeminence. In fact, since 1945, there have been almost unbelievable technological leaps in almost all areas of our existence, almost always originating on the other side of the Atlantic. The fifth technological wave of the industrial age had begun. Even superficial research, however, reveals how decisive high-tech discoveries sometimes seem to have followed the same pattern or to have had a history of origin that, in retrospect, seems contrived in the manner of a secret service. Doubts arose. In fact, years of research have revealed that there is a secret behind the technological fireworks of the postwar period over which the cloak of silence is still spread. This book examines whether the fifth wave of technology and its consequences are not based on the greatest intellectual theft of all time. What is new in history is that a country owes its technological supremacy, leading to unprecedented global economic and commercial leadership, in considerable part not to the industriousness and inventiveness of its citizens, but to a transfer of technology forced by military means and to the complete plunder of the intellectual property of a defeated nation. The principles of international law did not apply to the elites of the mother country of democracy any more than the principles of the rule of law, under whose name they had allegedly entered the war against Germany. Even my old history teacher said, "The Americans brought democracy to Germany and took its patents with them." With this, the clever man had wanted to show his students that behind Eisenhower's "crusade in Europe< lay not only bright messages of salvation (if one can even grant the term >crusade< such a thing), but the tough enforcement of closely related economic and technical interests. Probably hardly anyone is aware today that the USA was as dependent on the new German technology for its further well-being in 1945 as it was on the conquest of Iraqi oil wells at the beginning of the 21st century. History does not repeat itself, but it does rhyme! This book can never be a complete work after so many years of hiding and denial. Its purpose is to inform and to provoke thought. "Nazi brains help the U.S." Today, no one would dare to go public with such a headline. But that is exactly what Life magazine did on December 9, 1946, when it delivered to the astonished American public the hitherto secret revelation that German scientists were working as researchers for the USArmy. The article began with the situation at the end of the war in Europe. Life wrote that at the end of the war there was a "Battle of Brains" among the former allies. In this battle, he said, the United States was successful. The German scientists had been glad to be taken to the USA and had not held back any of their knowledge. The article, illustrated with many powerful pictures, explained to the astonished readership how versatile the German scientists' spoils were. Wernher von Braun was shown presenting the tail section of the V-2 to officers and civilians at White Sands, New Mexico. Dr. Alexander Lippisch was introduced as a nervous, eccentric "jet plane designer" as he developed a new, funny-looking wind tunnel design for a delta-wing supersonic fighter. Dr. Philipp von Döpp was pictured as a wind tunnel designer who was able to secure numerous documents during his escape from the Russians. Ceramics expert Eugen Ryschkewtsch showed his heat-resistant ceramic

blades for jet engines, and parachute expert Theodor Knacke, a former member of the Graf Zeppelin Institute, held up a specimen of his ribbon parachute for high speeds to the Life photographer. American readers then became compassionate when they saw in Life photos how Dr. Anselm Franz, a German scientist who had worked at the great Junkers aircraft factory in Dessau, packed a food parcel for his starving family in Germany. The labels on the American products were effectively made visible to the reader. Today, something like this would probably result in hefty revenues for indirect product presentation. But back then, people were not yet that advanced. Another photo showed two astonished >newcomers< among the scientists, staring longingly at the bulging display window of an American toy store. To allay the Americans' remaining fear of the German >supermen<, one showed German scientists receiving U.S. Army food rations in the cafeteria at Fort Blix. According to some scientists, this was the best food they had ever had in their lives. In this way, the naturalization of German scientists, which was urgently demanded by the government, the military and the US economy, was made palatable to the American public. In order to convince as many people as possible, the last page of the article read in thick letters: "They like the U.S. and want to stay" (they like the U.S. and want to stay). Behind this harmless sounding Life article, which almost pretended a merciful employment of starving German scientists in the USA, was the >Unternehmen Paperdip<. It was as transfer of >living knowledge< a part of the biggest theft of intellectual property of all times. Wl HAINS HELP U.S. German scientists are revealed as Army researchers ' , Even before the fightmg in Euxope ended, some of the tert brasins of Hit "rsprlzedscientificteam vanished frorn Germany. These men, ' who hadrnade etf country superior. to the Allies in the fields of'gnided .missiles, supertriwes, aerodyn",ics and hallistics, were rapidly transported to the . coun.es agamst which they had been fighting. In acquiring these human spoils 0 .war the Allied nations sometimes worked together. But at other times the maneuver becaine a competitive "battle for the brains," in which the U.S. sppar®utlywas successful. Last week the Army anno u nced that nianyof these i:ti!ts Were currently at work on research projects in America. . 1 ~e flnt ranks of the advancing U.S. ^armies there were special officers ■ . . Jgned to the job of locating and recruiting certain key ; men in German - ? "nce and industry.* Their task was not ddifcult. Though the scientists were, ^;:^ iuternation"! dernand, most were willing, ev:en eager, to accept the . ' I",ed can °ffers. Qnickly aild secretly Germany ' s brilliant.mi nds and pnce" ... at.were transported across the Atlantic. In this country the Army was - ng to receive thern at Wright Field, Ohio ■ and Fort Bliss, Texas. Later € ?Tere sent to White Sands, N. Mex, U.S. rocket-testing station. The -ti!ts set uP store and . went right to work on some of the Army's unc research problems. Answering countless questions for esger ^meriexPerts" the Germans have, so far, cooperated ffuly and heldnothing back. Scientists were needed because the captured German technology was often far too novel for the Americans (and the other Allies) to have patents and other written documentation aIIein sufficient for transfer. In fact, the takeover of German technical knowledge was not a coincidence, caused by the luck of war and total powerlessness of occupied Germany after 1945, but a deliberate action with a prehistory of many years: a renewed paralell to the events around the taking away of Iraqi oil, which was just as well decided and systematically prepared by the U.S. elites long before the invasion in 2003 for the >prevention< of Saddam Hussein's means of mass destruction, which were not available at any time. Already aIIein the uncovering of these almost unbelievable sounding processes in a liberal, democratic and free trade nation calling itself, it becomes clear why a taboo exists here until today. Chapter 1 Why the German patents and inventions were so important for the USA Did the

World War II save the U.S. from a new depression? Did the outbreak of World War II save the United States from falling into a new depression? That the United States, through excessive stock speculation, was largely responsible for bringing about the financial collapse of the world economy in the years 1929 to 1931 has already been described elsewhere. The ensuing world economic depression

and tariff wars then harmed the U.S. much more than any other economy. The destruction of the open world trade order had to hurt U.S. exporters more than anyone else, given the country's industrial and agricultural productivity. The nation's gross national product fell by nearly half in three years, from $89.4 billion in 1929. All world trade collapsed, but the U.S. share of world foreign trade fell even more sharply from 13.8 percent in 1929 to less than 10 percent in 1932. By March 1933, U.S. pig iron production had fallen to the level of 1896. The resurgence of the U.S. economy is popularly attributed today to Roosrvelt's ,New Deal<,

which the new U.S. president elected to office in 1933 had announced. In reality, the >New Deal< was much less successful and in no way justifies the halo of glory with which it is surrounded today.1 While the output of other major powers such as England, France, Germany and Italy recovered significantly by the mid- or late 1930s, the United States was plunged into another serious economic convulsion in 1937, losing much of the ground it had regained in the previous five years. A second stock market crash loomed. But because of the world economy's evolution away from globalization toward trading blocs that were much more self-contained than they had been in the 1920s, this second American collapse did little harm to other countries. As a result, the U.S. share of world economic production was lower in the year of the Munich crisis in 1938 than at any time since 1910, whereas the German share increased by forty percent. The national wealth of the United States, the land of proverbial wealth, was steadily declining, while its national debt was increasing at an alarming rate. Before the outbreak of World War II, Deutschrand had been able to increase its national wealth by 40 billion marks a year and had also got a better grip on the problem of unemployment. Thus, most of Germany's 6.3 million unemployed of 1932 were back in work by 1936, while R^^evelt, with 12.8 million people out of work in 1933, was still left with 10.4 million unemployed in 1938, despite his >NewDeal< program. Rcx'SEvelt was facing the failure of his economic program, while Germany was (relatively) in first place with it, in accordance with the economic and geopolitical conditions of the country." In addition to the development of trade blocs, one of the great problems of the U.S. economy was that, as a result of the stock market crash and the consu^ur restraint, new technologies such as radio, aviation, motion pictures, and telephones did not create the usual new great fortunes. In the face of this slack demand, not helped by the recessions of 1937 and 1938, the various plans of the >New Deal< were not enough to stimulate the U.S. economy and take advantage of the sleeping giant's< poorly utilized productive capacity. Two-thirds of American steel mills still lay idle. The blow to America's rich, whose money was largely invested in >trusts<, came from many directions in 1937/38. Because of R^^evelt's unfavorable tax laws at the time, they had to rely on capital gains on stocks they had bought before the depression of 1929-1931 and which now threatened to collapse again. As in 1914, when the government of the British Empire faced national bankruptcy, dark war clouds gathering over Europe now came to the aid of the American economy. While R^^evelt's hands were still tied by the U.S. Congress at the Munich Treaty in 1938 due to the "Neutrality Act," things were already different in 1939. Until then, R^^evelt succeeded in finding ways and means to oppose Hitler as skillfully as successfully. Had America changed from a balancing neutral great power to a warmonger for economic reasons? As early as 1937, R^"evelt had begun to engineer U.S. participation in a future war by using numerous economic means, always hard on the edge of the law. Recalled here, among other things, was the export ban on helium to Germany, which led to the disaster of the airship >Hindenburg< at Lakehurst.1 All this had not by then led to the urgently needed higher sales of American technology on the world market, so that the time fuse to the next U.S. stock market crash was still ticking. R^^evelt's desperate move of January 12, 1938, to solve U.S. economic problems through an alliance of a >New World Community< (including Germany, which he had declared a "rogue state" in 1937) failed the very next day because of resistance from England. The British government had immediately recognized that R^^evelt's >World Peace

Plan< was nothing more than an attempt to open up the trade zones and resources of the other countries to the ailing U.S. economy by means of a new world economic order and to have the U.S. claim to absolute leadership recognized politically.2 In addition to stimulating the U.S. economy through its own rearmament, the U.S. wanted to earn money from the rearmament of Europe, even if the normal export markets remained closed. In November 1938, R^^evelt therefore proposed to the U.S. Congress that the previous >cash and carry< procedure (payment on collection) for the delivery of war weapons to England and France be replaced by a new loan and lease system. This financing concept would have allowed customers to afford more weapons purchases in the U.S., since on the outside their liquidity was (apparently!) less strained. However, as any modern leasing customer knows, they would have had to pay more than the outright purchase price by the end of the lease term. Even if ROOSEVELT's proposal did not find a majority in the U.S. Congress, because one was still in the middle of peace, the procedure was introduced later during the war as >Lend and Lease< and provided then for enormous profits with the American weapon manufacturers. Politically, R^^evelt let Poland, England, and France know that the U.S. President wanted to go to war with Germany. For example, on November 19, 1938, the American ambassador in Paris told his Polish counterpart, "Only force and finally war can put an end to Germany's insane expansion. "3 The American president also successfully torpedoed a possible Danzig settlement in 1939. The former American ambassador in London and father of the future U.S. President John F. Kennedy, Joseph Kennedy,1 said in December 1945: "Neither the French nor the British would have made the German-Polish question a reason for war if Washington had not been constantly drilling. "2-4 Behind the war nostalgia, however, there were not least good economic reasons. While in 1939 the US armament programs were already taking off, this was intensified after the outbreak of World War II until 1940, when R^^evelt, despite the strongest domestic resistance, increasingly undermined his country's neutrality and massively supplied Germany's enemies with weapons via the >Lend and Lease< program. The stimulation of the ailing U.S. industry was further supported by the fact that the fear of the Axis powers ensured not only modern armaments but also full order books for manufacturers of completely obsolete, unsuitable weapons systems. Almost anything that could shoot was in demand. Pearl Harbor finally caused the lights to go on in the factories, warehouses and shipyards of the USA. In the first six months of 1942, U.S. procurement officers placed orders worth $100 billion, more than the U.S. economy had ever produced in a single year. Stock values were driven up in the stock market boom of 1942 to 1945. For example, the diaries and letters of officers from wealthy families contained delighted comments about the increase in the value of their stocks alongside reports of the advance in France in 1944 or the victorious battles against the Japanese in the Pacific. Unsentimentally, Americans made themselves pay for everything supplied to the allies during the war. When gold was no longer enough to offset arms deliveries, U.S. elites also took England's empire >piece by piece< in payment and, to top it off, had economic and financial dominance cemented for them after victory in 1944 (Bretton Woods Agreement). Unlike in 1939, the allies of the USA now had no possibility to refuse. Even now, they would have been doomed if the U.S. had stopped providing them with material aid. The new Bretton Woods system allowed the U.S. to painlessly finance future wars, conduct economic campaigns of conquest around the world, and purchase expensive foreign products without Boeing B-1 7: Economic Promotion or Preparation for War?

In January 1936, the RoosEvELT government ordered the first flying fortresses< of the Boeing B-17 type. At that time, no adversary was visible on the horizon for the USA worldwide. Without the order for what was then still called the Y1 B-1 7A technical wonder, the Boeing company would have been bankrupt. At the time, it was difficult to explain to the U.S. public why this offensive weapon was necessary for a (future) war in Europe to defend America. Limitation to be introduced because the U.S. banking system was allowed to print the necessary dollars for it in any quantity. These then had to be

accepted by the partners as the >lead currency< without any queries.1 But the whole thing could only last if two further conditions were met in the postwar period: the abolition of alternative trading systems and U.S. technological domination of world competition. To this end, an archive on leading German scientists had begun to be compiled with the help of espionage and emigrants as early as 1936.2 This was done, mind you, three years before the outbreak of war in Europe and five years before Pearl Harbor. B. The Enforcement of Economic Liberalism in World Trade "There Could Be Only One": the U.S./Germany Economic System Competition from 1933 to 1941 At the end of the 1930s, the system of free world trade, embodied by its guiding power, the United States, faced great challenges from authoritarian, economically successful power blocs. Even more threatening to the defenders of the old order was that one was even in danger of losing. The government of the Third Reich had broken away from the gold standard and introduced the >labor currency<. For this purpose, bilateral trade agreements on a clearing basis were concluded with 25 states all over the world. The result was a pure barter trade of modern German industrial products for needed raw materials and foodstuffs. The dollar and the pound sterling were largely leveraged out, which hit the elites of >Wall Street< hard. The German system worked perfectly

well, and there was a danger that other countries would adopt this approach. Germany's trading bloc was particularly dangerous because it was complemented by highly successful domestic gasoline, diesel, rubber, and textile fiber production. A plethora of >new patents and inventions aroused additional suspicion and envy. As early as around 1880, the Swiss professor Gustav Ruhland, at the instigation of Bismarck, had stated that economic reasons were the main cause of war.1 Since there are good reasons to believe that this was the case before 1914, this paper examines whether such influences also existed in the Second World War. The United States had retreated into the policy of isolationism out of disappointment with the Versailles Peace Treaty in the 1920s. The American people never again wanted to sacrifice their sons >for nothing< on the battlefields for foreign interests. The U.S. elites disagreed. Rather, for their economic well-being, it was necessary to prevent a new trading system from paving the global way and bursting economic liberalism like a stock market bubble. There was also a threat from another side to the >Western system as we know it today: What would happen if authoritarian economic systems succeeded in proving that the >unbreakable link< between liberal democracy and prosperity, still considered true today, was a mere fluke? In fact, as early as 1935, there were statements such as that of the former British War Minister Lord Motpistone, who advised his countrymen: "We have much to learn from the brisk Germans . . . Bolshevism and Communism are banished in Germany, but reaction and slovenliness are also banished. What has been accomplished in Germany we can accomplish in England also and even better. It is time for us to get to work. "1 The Anglo-American elites now had to see their existence as threatened in the homelands as well. Who went to work instead was U.S. President F. D. ROOSEVELT. From 1936 to 1941, he had plenty to do to bring his country back to the realism of the wartime world.2 The Subjugation of the German Economy to American-Dominated Free Trade It was also a matter, as statements by leading American officials prove, during World War II that U.S. industrial supremacy could not develop in the postwar period without first breaking up the German economic system. U.S. Attorney General Francis Biddle let the cat out of the bag here in late summer 1944, after the Allies had successfully set foot in Western Europe with the help of German traitors. Biddle bluntly told a Senate committee what had to be done with the German economy: "These German industrial companies have decided those contracts that we have to take care of. The period between the wars was merely an armistice which German companies used to wage economic warfare against us. . . The pattern of behavior which has guided the activities of the German industrial cartels was developed long before Hitler came to power. "3 Once again it becomes apparent that America's entry into the war was by no means only about liberating Europe from HiTLER

Germany. Biddle continued, "The German government and people have never understood, much less adopted, the principles of economic liberalism as it has defined the history of the United States. The German monopolies have survived two wars and undoubtedly represent a menace to peace in the world. As long as they persist, a European economic order independent of them will hardly be able to emerge. I therefore call for breaking the power of the German monopolies. The purpose of such a program will not be to destroy the German economy in its entirety, but to transform it into a system from which there will no longer be any threat to the civilized world. . . Nor can such a program be put down in writing in a binding way at the present stage of military operations. It will have to await the detailed control of those enterprises, which can only take place during the occupation: These measures did not take place after the last war." There can be no doubt, therefore, that one of the decisive war aims of the Allies was the elimination of the successful and therefore dangerous German foreign trade model. They did not want to destroy German industry in the process, because they needed it in the economic reconstruction of Western Europe in the postwar period as a compliant, dependent >production location< and as a branch of American companies. In order to accomplish this, a period of occupation was necessary, i.e. the prior destruction and occupation of the German Reich. Behind the Allied wartime goal of "unconditional surrender" lay economic motives in no small measure. Indeed, Germany's ■"barter economy," based on fair clearing agreements, had triggered a dramatic expansion of German trade with Latin America and southeastern Europe in the 1930s and generated suspicion, even hatred, in the United States and England. It was not until the war that this situation was remedied, for the clearing system introduced by Germany had by then depressed prices for the same goods outside the clearing area, thus reducing trade and profit opportunities for American and British firms whose countries held high the flag of "free trade." This threat had to be eliminated. The physical occupation of Germany, however many casualties it claimed among the soldiers of both sides and the civilian population, only made possible the establishment of an American-controlled and dominated "free economic order." Immediately after the failure of the German Battle of the Bulge in January 1945, therefore, General Eisenhower requested the creation of a task force of experts for his financial branch (Financial branche) at SHAEF to detect the planning of German industry and prevent its continuing intentions in the postwar period. In February 1945, the newly appointed task force, headed by Attorney James Stuart Martin, a Justice Department expert, flew to England, where it went to Bushy Park near London to the headquarters of the future American military government in Germany. The head of this economic department was at first Colonel G. K. Howard, who was replaced by Brigadier General William H. Draper after an intrigue by the American intelligence service. It is probably no coincidence that in civilian life Draper sat on the financial board of the investment group Dillon, Read & Partners. This ensured that American high finance had control over the reorganization of the German economy. After the occupation of Germany, the Americans were horrified to discover that in the archives of the director of IG-Farben, Georg von ScHNiTZLER, were documents containing Biddle's testimony in the U.S. Senate in 1944. Reichsführer SS Heinrich Himmler had marked them in important places with his green ink. James Stuart Martin's name was also underlined. Had these important documents been transmitted via German agents (which, according to today's reading, allegedly never existed in the USA) or by >secret supports? In any case, the German state and economic leadership knew,
what the Allies intended to do with German industry. After the surrender, William Draper, the head of the U.S. military government's economic department, set the German economy on the new course desired by the Americans. As a staff member, he had secured the help of Germany specialists from major U.S. industries such as ITT, Westinghouse, Standard Oi!, General Motors, Republic Steel, and American Cyanamid. Since the German elites, under the pressure of the new conditions, were only too willing to continue according to American terms, Draper gave internal instructions to go easy on the

German elites and to stop reparations. There was seemingly nothing standing in the way of the triumph of U.S.-led free trade and globalization. C. Obsolete into the Future? The U.S. Technology Deficit and Its Unconventional Cancellation Unrestricted economic dominance with lethal risk At the end of the war, U.S. power was about the same as England's in 1815 after defeating Napoleon, though its actual dimensions in absolute terms were historically unprecedented. 1 Thus, as a result of the tremendous surge in wartime spending, the American gross national product, as measured by the dollar exchange rate of 1939, rose from $88.6 billion to $135 billion in 1945, which would amount to about $240 billion at today's dollar exchange rate. At last, Americans had succeeded in eliminating the >slump< in their economy that the >New Deal< had not really remedied. Underutilized resources and labor were now being used >reasonably< as the size of manufacturing plants in the country increased by nearly 50 percent during the war and the output of goods actually increased by over 50 percent. In fact, from 1940 to 1944, United States industry had grown more than ever before or since, by over 15 percent. Although most of this growth was due to wartime production, the production of goods for civilian use also increased, so that the civilian sector of the economy was not as badly affected as in other U.S. allies. In fact, the United States was the only country among all the great powers that became richer rather than poorer as a result of the war. At the end of the war, for example, Americans held $20 billion worth of gold reserves, which accounted for nearly two-thirds of the world's total.2 More than half of the world's industrial output came from the United States, and in goods production of all kinds, the country's world share was 33 percent. The United States was also the world's export champion in 1945, and even a few years later it still dominated one-third of the world's exports. Economically, the world was now, as was said at the time, >Washington's oyster<. Added to this was a determined effort by the military to secure strategic control over unfettered access to strategically important materials such as oil, rubber, and metal ores. By 1945, the majority of the world's uranium reserves were also under the control of the United States. As early as 1943/44, plans had been made for guaranteed U.S. supremacy in the areas of world finance, international civil aviation, and shipping.12 By contrast, the future prospects of the other victorious powers looked deplorable: The Soviet Union had ruined its victory against Hitler's Third Reich, and Great Britain was completely exhausted financially and economically, so that it was finished as a world empire. The former great power France was in any case regarded as a co-winner by the other Allies out of sheer friendliness. In fact, it now looked as if America's economic superiority was the fulfillment of the American >Manifest Destiny< and >the American experience< the key to the future. By >Manifest Destiny< is meant nothing other than the doctrine of U.S. expansion across the Americas and, later, the worldwide spread of the American system. Behind the scenes, however, leading economic and military circles in the USA at the time of this triumph probably knew that they had been outrageously lucky. Had America been relegated to second-rate technology in 1945? At the end of World War II, the American public had the exuberant impression that American science was in a healthy, almost world-leading position thanks to developments such as atomic bombs, radar and penicillin. Now, with the return to peacetime, average Americans expected the dawn of a brilliant age, fostered by their own superior scientific discoveries. In fact, this was a propaganda ploy dating back to wartime. After a careful study of the real state of American science, a specially appointed subcommittee of the Military Committee in the U.S. Senate in 1946 could not share this optimistic opinion, neither with respect to the present state nor the future of American science.3 On the contrary, the detailed and objective analysis of American war science led to downright disturbing conclusions. The chairman of the subcommittee, Mr. Kilgore, correctly observed that after the end of World War II no nation was stronger than its scientific resources and that the evidence was clear that mankind was on the threshold of a time of great opportunity. American science was not at all equipped for this, as was relentlessly revealed to the Senate. It was appalled to discover that virtually no basic scientific research had been

done in the U.S. during the war years, even though the national research budget had increased from the prewar level of $300 million to over $800 million in 1944. During the war, U.S. scientists had instead been concerned only with finding profitable applications for previously discovered scientific principles. Worse still, even the scientific discoveries that U.S. scientists applied during wartime had mostly been made in Europe, not by Americans. It was sobering to discover that the revolutionary sulfonamides had been discovered in German research laboratories, that atomic disintegration had been discovered in Berlin, and that the foundational work for radio and radar and the vast American electronics industry had been the work of a German professor.1 Penicillin came from England, and even DDT, so often portrayed in propaganda pamphlets as a purely American invention, actually came from Germany and Switzerland. Witness after witness confirmed to the committee the relative weakness of American science in basic research, compounded by the fact that there was a real shortage of trained American scientists. In the case of the Nobel Prizes for chemistry, medicine, and physics up to 1945, the European/ U.S. ratio was clear: 113:18. A clearer sign was hardly possible. The Senate report of April 9, 1946, also cited the words of Vannevar Bush: "Our national strength in the fields of applied research should not blind us to the truth that in terms of pure research, that is, the discovery of fundamental new knowledge and basic scientific principles, America has accepted a second-class place." At the end, one expressed the fear that America would soon be unable to keep pace scientifically with countries like Russia and England if nothing happened. This hardly sounds like a country that was on the inexorable leap to becoming a world-dominating technological superpower. >Planned Obsolescence< or Just Lucky During World War II, the U.S. succeeded in achieving total victory over its opponents Germany, Japan and Italy by virtue of its overwhelming wartime production and rose to become a global monopolist. Only 5 percent of American industry faced significant foreign competition after the end of the war. To the outside world, the chances of being able to assert itself permanently as the world's leading economic power looked overwhelmingly good. The country had an economic infrastructure intact in almost all respects and a hungry domestic market. It was foreseeable that the other countries would continue to become the outlet for the superior industry of the United States. In reality, it was the principle of large numbers in production output that won the war for the Allies. It succeeded in producing huge numbers of proven weapons that were easy to manufacture and compatible with each other. The goal was to maximize profits. It was also accepted that individual unreliable types of weapons such as airplanes and ships were produced in huge numbers, so that the failures hardly mattered.1 In these wartime developments, as in the civilian economy, the principle of >planned obsolescence< was applied, namely the production-engineered and planned early obsolescence of products, the constant demand-generating >perpetuum mobile<, of which generations of American entrepreneurs and managers were proud, as if they had invented the wheel once again. The task of the American scientists under the leadership of Vannevar Bush was to adapt technology that had already been proven during the war to the modern requirements of the

The task of the American scientists, led by Vannevar Bush, was to adapt technology already proven during the war to the modern requirements of the battlefield and, at the same time, to ensure that the industry was able, through standardization, to achieve considerable sales and, in some cases, excessive profits from the mass production of these weapon types. Allied countries such as England and Russia were also supplied in this way and saved from defeat by the German Reich. They also got paid for it, after all they were not only the good Samaritan. So England had to transfer its national gold treasure to the USA. Without further ado, the English paid their debts by also delivering the gold bars from the vaults of the Belgian and French state banks, which had been brought to England in confidence during the German occupation. Although the course of World War II proved the profit-maximizing American strategy of >quantity beats quality, it was clear to leading American military and business leaders that

they had taken a great risk in doing so. There was a threat that the mass use of older technology might become insignificant in the face of much better newer technological innovation, even to the point of defeat. As it turned out at the end of the war in Europe, this danger actually existed almost to the end. It was an incredible game of vabanques that ended well for the United States, mainly with the help of German traitors.1 Externally, the Americans in charge defended their wartime actions with great vigor. Vannevar Bush was vice president and dean of the >Massachusetts Institute of Technology< (MIT), head of the >Carnegie Institution of Washington<, and led the >Office of Scientific Research and Development (OSRD) of the United States during World War II. Thus, Bush was responsible for coordinating U.S. scientific efforts in World War II. At the request of his presidential friend Franklin D. R^^evelt, he took over OSRD and led it to success with calculated risk. Vannevar Bush, when asked after the war about the American failure to develop jet aircraft in World War II, justified this strategy by saying, "We did not urgently need these aircraft, and therefore we did not exert ourselves to develop them. "2 In reality, leading U.S. circles, as well as Bush himself, realized as early as 1944 that the United States was taking a great risk. Horrified, many senior military officers, including the commanding general of the U.S. Army Air Force >Hap< Arnold, noted that the Germans were far ahead of the United States in numerous fields of military technology. To them, the victory over Germany was much less impressive than it appeared to the outside world because far too much luck was involved, and luck was something senior military officers did not like to rely on in such a serious matter as a war. Colonel Howard E. WATSON, an engineer and test pilot who would later lead >Operation Lusty< for General Spaatz, put it this way at a speech in Ohio in March 1946: "If Germany launched the first jet-powered aircraft before the German Army invaded Poland.... Why did we not learn these secrets before? Revolutionary developments in the aeronautical field were well advanced in Germany long before we fired even the first shot against the Nazis. But, a long time after that first shot, after we had achieved with considerable difficulty the upper hand over our enemies, we found ourselves in scientific no man's land. . . Of course, we won that war, but we must remember that we had a lot of luck on our side." At the end of his talk, Col. Waton asked his audience, "Do we want to trust to luck again?" And Col. Donald L. Putt, who had been in charge of exploiting German scientific gehei^rnis, put it similarly: "The Germans were ahead of us, in some fields between two and fifteen years." Both WATSON and PuTT, therefore, advocated adopting German technology with American pragmatism.

Donald Putt asserted, "It must be said here that the Germans were ahead of us in many fields, such as missiles, guided missiles, jet engines, jet aircraft, synthetic fuels, and supersonic research.... . German developments in these fields are now of the greatest importance to us. They enable us to achieve hitherto unheard-of speeds in air transport, to contemplate later flights high into the stratosphere and someday into the realm of interplanetary travel. Thus, we might ask whether, in possession of this information, we continue to burden the American taxpayers with time and money, or whether, if we are not too proud, we prefer to take advantage of the information generated in Germany. The American industrial apparatus is called upon to begin where the Germans left off and to provide us with the necessary equipment to make us leaders in the scientific world. "1,2 Major General Hugh Knerr expressed himself even more drastically: "The occupation of German scientific and industrial institutions has revealed the fact that we are alarmingly backward in various fields of research. If we do not take this opportunity to seize the technical apparatus and the minds which have developed and directed it, and if we do not immediately put the German technicians back to work, we shall remain several years behind. "1 To prevent this, the greatest plunder program of >intellectual knowledge< of all time was undertaken. D. The Birth of the Project to Secure America's Technological Domination Evil Omens After the Japanese attack on Pearl Harbor, the United States also officially entered World War II. After the experience of World War I, it was expected that in the event of war, the Allies would seize and cancel the patents of

enemy nationsat least for the duration of the war. Quite as was to be expected, the incumbent U.S. President R^^evelt and his Secretary of the Treasury, Henry Morgenthau, who later became known as the inventor of the infamous plan named after him, used the "Trading with the Enemy Act," which had been re-enacted on the model of World War I, for this purpose. The Department of Justice, however, soon found that the old law gave the United States no power to seize certain enterprises from foreign companies and even companies of enemy foreign countries. This seemed quite hopeless in the case of companies controlled by a majority of neutral countries. A corresponding amendment to the Confiscation Act was therefore quickly created, so that it was finally possible to confiscate holdings owned by citizens and companies of neutral countries. This went far beyond the procedure used during the First World War. In this way, the U.S. seized a total of over 50,000 patents, including those belonging to citizens of countries occupied by the Axis powers during the war, such as France, Holland or Belgium.1 In addition, there were 500,000 copyrights for German books. Morgenthau and his allies were not satisfied with this: even original American companies such as Standard Oil were affected by patent theft. Standard Oil had legally taken over licenses and patents from the German I.G. Farben in The Hague in 1940, long before America entered the war. Among them were two thousand important patents, for example the Buna patents for the production of artificial rubber. For the American company, it was particularly important to get hold of the secret of producing artificial rubber from crude oil in the event that either rubber supplies ran short or imports into the U.S. became impossible for political or military reasons. In fact, on March 25, 1942, the American trustee for enemy assets, Leo T. Crowley, seized Standard Oil's patents, which had been legally purchased from the Germans. In addition, the Justice Department sued Standard Oil for a violation of the antitrust laws. Of necessity, Standard Oil agreed to pay a fine of $50000 and also agreed to grant temporary licenses to other American companies based on the earlier two thousand German patents. Justice Minister Biddle was apparently particularly taken with the chemical companies, because on April 24, 1942, he also had the company General Aniline and Film (G.A.F.), majority controlled by a Swiss company, seized, which until then had been able to carry on an extremely lucrative business in the USA. Standard Oil finally sued in July 1944 in a district court in New York against the confiscation of the March 1942 patents. The legal dispute dragged on until April 1948. Then a face-saving solution was found for the U.S. government, in that the confiscation was upheld. However, it was decided to hold a "non-public auction" of the disputed patents. >Coincidentally, Standard Oil won the bid and now had to pay the American government another 1.2 million dollars for the patents and licenses it had already acquired. The seizure of the Swiss company G.A.F. was also the subject of a legal dispute starting in 1946. decades of litigation against the United States government. It was not until 1961 that the then U.S. Attorney General Robert Kennedy offered the Swiss an out-of-court settlement. Again, G.A.F.'s share, including all rights, was to be auctioned off and the proceeds divided between the American government and the Swiss company. Kennedy acknowledged that the Swiss claim was justified and that this was not a German shadow company. On March 9, 1965, the auction of the G.A.F. company raised a total of $329141926.49. The lion's share of the sale price went to the American government to "compensate the claims of Americans who were injured or suffered material losses in the war." Five hundred million D-marks remained with the Swiss company Interhandel as the former owner.1 As early as 1941/42, it was clear to experts that this time the American approach would be much harsher than after the First World War. Vannevar Bush blows the whistle on German intellectual property Vannevar Bush was one of the most powerful members of the American scientific and technical elite during World War II. The engineer, inventor and politician became best known for his political role in the development of the U.S. atomic bomb. Today, his fame derives more from the fact that Bush defined the basic features of the >World Wide Web< with his Me^^x machine in 1945. He cold-bloodedly

directed the coordination of the American military scientific war effort during the war, accepting the risk of being outflanked by new German technology.1-2 After the war, Bush justified his former actions by saying that it had been unnecessary for the U.S. to try to implement such gimmicks as guided missiles, ballistic missiles, and useless technology things like TV-guided missiles, as the Germans had done during the war. He referred to these weapons as >science fiction in the Buck Rogers or Flash Gordon style<. In 1949, he also made fun of rockets that were supposed to fly so fast that they could leave the Earth's gravity to hit the moon for some civil or military reason. Thinking in terms of maximum economic benefit, Bush made a point of stating that instead the basic element of American defense against a possible surprise attack should be a highly effective intelligence detection system. Here Bush referred to what Allies had used to win World War II: By being able to read and interpret the secret codes of the Axis powers without interference at crucial stages of the war, they were silent confidants of the Axis powers' most secret war plans and sat, as it were, at the conference table of Hitler, Mussolini or the Japanese General Staff. At the same time, the Allies were well informed about scientific and military developments through their codebreakers. To this information-gathering system were added effectively working secret services, which cooperated closely with high-ranking German and Italian traitors. In the spirit of this >intelligence gathering<, as early as 28 August 1944, Vannevar Bush proposed to the Secretary of War and the Secretary of the Navy that the tasks of the new CIOS be considerably expanded. CIOS had been launched shortly before, on 21 August 1944, as a joint venture by the Anglo-American General Staff CCS. The CIOS agency was originally charged with compiling so-called >black lists< that listed military targets about which information was urgently desired. Bush now proposed that CIOS teams spy not only on military targets but also on German "technical information of an industrial nature." This information was to be gathered not only in Germany but also in German-occupied countries. Such information, Bush predicted, would not only further the American war effort against Japan, but also help American industry maintain its place in world trade and create employment opportunities for discharged veterans. Skillfully making Americans fear that Britain would undoubtedly want to gain any kind of information for its own national industry, Bush suggested that missions currently under way and planned in the search for weapons and military equipment be expanded to include industrial technology search teams that would have objectives beyond the war. The response came in a flash from a variety of agencies and personalities and was overwhelmingly positive. Thereupon the War Department decided that these proposals should be carried out as quickly as possible. The intention was to question German technicians, seize their laboratories, records, and writings, disassemble and examine German military and industrial products, and uncover all German manufacturing processes of interest. The hunt for Germany's profit- and power-promising technologies, both civilian and military, was hereby unleashed. There are no indications of planned later settlement payments or even a >fair< division of the spoils among the allies. After the USA had become the workbench of the world, the American elites hoped that by taking away the German patents and inventions, a qualitative advantage of the US industry over the rest of the world would follow. It had been recognized that there was an inextricable link between technology, military power, and economic dominance. Chapter 2 How the >Company Patent Heist< Was Organized "Developing ideas is expensive, stealing them is cheap." Andrew Gowers, head of communications and marketing for > Lehman Brothers< Executive Order 9604 President Truman's "License to Steal" "No American president owes more to the Germans than Harry S. Truman, in office from 1944 to 1952," writes Michael Stürmer.1 After the official end of World War II, the American Army understandably wanted to be freed from "commercial exploitation" of civilian targets. Responsible individuals were therefore already anticipating the imminent end of information-gathering operations. The essential German military secrets in the field of jet, missile and submarine technology had been successfully taken into

their own hands. Why help industry in its purely commercial endeavors? One had fulfilled the mission set by the people and won the war; the armed forces just wanted to get home quickly. Here the U.S. Army was to be badly mistaken. They had not reckoned with American industry and its appetite for German patents and manufacturing processes. As early as May 14, 1945, the Secretary of the Joint Chiefs of Staff (JCS) had written to the State Department that the knowledge gained in the previous investigations should now be distributed to American businessmen and industry. What was lacking, however, was official permission from the White House for these commercial enrichment operations on German intellectual capital. On August 25, 1945, President Truman made up for this with the promulgation of his Executive Order 9604. The latter ordered the release and distribution of scientific and industrial information to civilian industry. It was nothing more than a government license to steal information without limits, for Truman defined the term scientific and industrial information< as all information encompassing scientific, industrial, and technological processes, inventions, methods, devices, improvements, and advances captured by U.S. agents in enemy countries before or after the issuance of Executive Order 9604, wherever that technology had originated.2 This included "liberated territories" if the information there had an enemy origin or had been purchased or expropriated by enemy countries. 46 In Frankfurt/Main, a deadline had also already been set for the end of the looting operation. By December 31, 1947, the task was to be completed. Whether President Truman was aware that he was violating international law with his executive order has never been known. Thus, an apparent legal framework had been created within which the greatest looting of intellectual property of all time could take place. Germany's economy, at least, owes more to President Truman than to any other American president. Order, Distribute, and Destroy The Frankfurt Document Conference deserves to be looked at a little more closely. Much of what happened then continues to influence how we see the world today. From October 22 to 25, 1945, the >German Documents Conference< was held at the headquarters of the American forces in Europe. It was attended by all civilian and military authorities concerned with the occupation of Germany. In the preamble to the discussion of the conference, it was mentioned that documentary material was one of the most important sources of information on all areas of German activity. Today we can wholeheartedly agree with this statement! The documents taken away would not only serve the purpose of
of historical reconstruction of the events surrounding Germany's warfare, but they would be the basis of action for many Allied agencies responsible for the administration of the country and the program of denazification. The documentary material would also help in the proper exploitation of the technical and scientific information the Germans had developed during the war.1 The conference would likewise have to solve the difficult problem of denying certain archives, records, and papers to the Germans. Serious consideration had to be given to plans to secure the organized destruction of papers that were no longer of value to the Allies, yet would have to be denied to the Germans. The American authorities were also to pay unremitting attention to the final disposal of those documents which had to be retained in Germany for its own purposes but which could not be allowed ever to fall back into German hands after the occupation troops had left. The Americans particularly deplored the attitude of certain British archivists who acted correctly and >froze< the >dangerous< documents in place, thus seriously delaying the problem. It would therefore have to be coordinated with the War Office and the armed forces as to which documents should be destroyed and which should be preserved, denied to the Germans forever and ever. A paper was to be prepared on this, not only to guide one's own actions, but also to be passed on to the other victorious powers for appropriate action. Further on, the implementing regulations point out that a quick "final solution" of the German document problem was indispensable. Also, the increasingly critical shortage of linguistically competent personnel should not jeopardize the long-term plans for the distribution of documentary material where the "affected (German) documents"

were of such a nature. Elsewhere, it was pointed out that certain documents in American custody were untraceable for other reasons. This is probably a mild paraphrase for the fact that these documents have already been purloined by interested parties for their own benefit. All this shows that in dealing with the enormous quantities of captured documents (1600 tons in the document centers alone), it was also a matter of systematically destroying or taking away documents that could be harmful to the Allies and useful to Germany. It looks quite likely that a large quantity of such documents was denied to the Germans in order to maintain the postwar view of things desired by the Allies to this day. This is clearly stated in the published documents about the Document Conference in Frankfurt/M. Apparently, to this day, people are afraid to admit the truth. What would we give for it, if the final paper of the >German Documents Conference<, written about the document destruction, would be published? From now on, no one can deny that there was a conference-organized destruction and denial of documents that could be politically and economically useful for Germany's postwar period. The Allied teams consisted of small groups of military and/or industrial and commercial specialists. Before looking at these teams in more detail, it is striking that there was often little coordination or cooperation between the various agencies and teams, which was sometimes quite intentional. The seemingly uncoordinated competition of search and seizure teams often drove the German laboratories and factory owners to despair, as many >targets< were >visited< by different teams in succession. What one team had (still) left behind in the respective German locations was then usually seized by others. The main agencies working in Germany and their respective >areas of interest< were the following: OSS (Office of Strategy Services), American intelligence, observed targets of strategic and political importance and made this information available to other agencies.1 2 3'1 2 * 4 EEIS (Enemy Equipment Investigation Service) was to secure German weapons and military equipment such as aircraft, tanks, binoculars, ammunition, and metalworking equipment to ensure their testing as well as the instruction of Allied personnel. Later, the service was rededicated to testing German industrial equipment in general. ALSOS mission was to search for the atomic bomb in Germany and for detonators suitable for it. Also ALSOS had tasks of 'counter-propaganda^ which is forgotten today. CIOS (Combined Intelligence Objectives Subcommittee) was created by the Joint Anglo-American General Staff (CCS) on August 21, 1944. Its purpose was to ensure military-civilian cooperation between the main economic, military and political entities of the two countries for their common benefit. CIOS is the first time the word)exploitation< appears as an operational term. Translated, this means >exploitation< and >sucking< and hits exactly what was meant. After initially dealing only with military targets (>Black List<), a rapidly growing >Gray Lister was later added, which included "targets of economic importance." Then, beginning in May 1945, the >Black< and >Gray Lists< were combined into one. In February 1945, the ClOS process was given administrative order by bureaucrats in London and Washington through the creation of the >Combined Advanced Field Teams< (CAFT), since the CIOS had in the meantime acquired the less than friendly nickname of >Chaos Teams<. The CAFT teams were originally intended to provide better oversight and guidance to the CIOS teams. The goal of the CAFT was to assess the value of the inspected targets and then, if additional specialists were needed, to call for reinforcements through headquarters in Versailles. From there, efforts were then to be made to the CIOS Secretariat in London, which was to send an investigative team on its own initiative. It can be seen that this was a very cumbersome bureaucratic process. It did not come about by accident, however, because this procedure usually resulted in a delay before a CIOS team could arrive at the intended new destination. This, of course, often allowed the respective British and American clandestine organizations quick and easy access to the new developments before the parity-manned cumbersome CIOS
team could arrive at the target. CIOS's lack of operational agility was thus intentional. CIOS was nevertheless given such value that U.S. Army operational units complained that their transportation

capabilities were being taken away, even to the point of demobilization, to serve CIOS interests. The more frugal U.S. President Cunton must have replied tersely to this, "!t' s the economy, stupid!" FIAT (Field Intelligence Agency, Technical) was the special American instrument for getting German knowledge in the industrial research field into U.S. hands. With headquarters in Frankfurt, the >collectors and hunters< were a division of the TUB. FIAT was particularly notorious and hated by the Germans. Belgians and Dutch also undertook industrial espionage missions in Germany using FIAT identity cards. BIOS (British Intelligence Objectives Sub-Committee) was the English counterpart to FIAT. Numerous BIOS reports are still used today to document German high technology during World War II. TUB (Technical Industrial Intelligence Branch) was later renamed TUC (Technical Industrial Intelligence Committee). TUB was initially an agency of the U.S. Joint Chiefs of Staff, but in January 1946 it was incorporated into the U.S. Department of Commerce (Department) in keeping with its importance. Its mission was to critically examine all sectors of the German industrial landscape and to secure any information that might be beneficial to American economic interests. During 1946, the TUB/TUC sent over 400 so-called investigators to Germany. Many of these industrial experts worked at their own company's expense and were sworn in as temporary government employees. Naval Technical Mission, Europe was originally a part of the ALSOS mission, but soon took on a life of its own, focusing not only on naval and air force objects but also on German industrial advances such as synthetic fuels and lubricants that might be of interest to the American Navy. They used the shipping ports of Bremen, Bremerhaven, Naples, Genoa, Rotterdam, Antwerp, Le Havre, Cherbourg, and Marseilles. By November 1945, the U.S. Navy had already shipped 9400 tons of looted technology to the U.S., including 350 tons from a mine in Luxembourg. In Ludwigshafen, an entire factory had been dismantled and loaded onto ships.1 TOM (Technical Oil Mission) was a non-military group paid for by the U.S. Bureau of Mines. It consisted of U.S. and British petroleum experts and was to research German synthetic fuels as one of its main objectives. We will deal with this very important mission and its results later in the text. ATI: The Air Technical Intelligence was
the intelligence arm of the United States Air Force and operated completely independently of the other agencies. It accomplished great things in capturing German technology of the future. On April 22, 1945, the so-called Exploitation Division< was created under the direction of Col. Huntington D. Shelton.2 USSBS (United States Strategic Bombing Survey)3 was a curious mission supported by prominent U.S. East Coast officials. It advanced ahead of U.S. forces in some cases and had casualties. The USSBS was ostensibly to prove the effectiveness of the Americans' strategic bombing war, which only >succeeded< more fairly than not according to multiple unscripted reports. Even then, USSBS reporters could not resist the phrase "that Allied air power would rather have been used differently or better." The high-profile cast of the mission (including George W. Ball, John K. Galbraith, and Paul Nitze) indicates that much more was at stake. What became known were 230 USSBS technical reports, which are extremely elaborate and often unique sources of information on many aspects of the U.S.'s >European War<. Army Ordnance was to secure loot specimens of interesting Army technology. Library of Congress, Mission to Germany was to oversee the segregation of 150 complete collections of all "propagandistic" (this was interesting too...) and "Nazi military publications" for the purpose of Auswer^mg and research. To this day, the history of the 150 collections taken with them remains unexplained.4 All of these teams worked under the official protection' of the Allied forces in their)Aussaugungsmission<. If necessary, civilians from these teams could also carry out the arrest of Germans. There are examples where this was done arbitrarily by civilians for fun. In addition, there were interested officers and soldiers who, "on their own initiative," were often more resourceful than their officially licensed >tracker dogs< and who, with the knowledge thus acquired, later set up new enterprises in Florida, California or the American Midwest and became rich. Chapter 3 The locusts are let into the field The complete

vacuuming out of German knowledge after 1945 was based on the taking away of original files and documents, on >on the spot< research reports, the taking of sample machines and the import of >living knowledge<. " After the end of the Second World War in 1945, the Patent Office ceased its activities ..." "After the end of the Second World War in 1945, the Patent Office ceased its activity. On October 1, 1949, the German Patent Office opened its premises in the Deutsches Museum in Munich." Only these two succinct sentences can be found in the politically correct way in the large Internet encyclopedia Wikipedia about an intellectual theft that is still unparalleled today.1 Until the end of the war in 1945, the German Patent Office, then called >Reichspatentamt<, had been in existence for 68 years. It had been founded on July 1, 1877 as the >Imperial Patent Office< in Berlin. In 1919, it was renamed >Reichspatentamt< after the end of the German Empire. On February 3, 1945, there was a heavy American air raid on Berlin, which cost 22000 lives. The German Patent Office was also badly hit by bombs, but the employees succeeded in restoring the office and making it ready for service again. Even before that, important parts of the German Patent Office had been relocated to supposedly safer areas as part of the relocations from areas at risk from the air war. For geographical reasons, these relocation sites were often located far to the east of the Reich, which was an advantage from the point of view of the bomb war, but which was to lead to danger from the surprisingly fast advancing Red Army in 1945. Ten patent divisions and the secret division had been relocated to Striegau and Jauer in Silesia in 1944. By the end of October 1944, some 500 employees had also been transferred there in several waves. Among them were also 380 patent examiners. Between the town of 10,000 inhabitants in Lower Silesia and Berlin, there was a regular patent courier service with motor vehicle and rail transport.2 The Soviet breakthrough on the Eastern Front led much too late, on February 7, 1945, to an attempt to relocate the office from Striegau back to Berlin. Although the return evacuation had been planned in advance, its approval had been granted much too late to allow for an orderly repatriation of the valuable documents. The test material, patent index and a copy of the trademark roll were sent to Berlin in four freight cars, on trucks and courier trucks. Of the four railroad cars, one reached Berlin, the other three were to be transported to Heringen an der Werra, but were lost en route. The trucks got through to Berlin, but this did not apply to all courier vehicles. Renate Weidauer, a contemporary witness, reported that on February 12, 1945, her father, an official of the Patent Office, barely made it to Dresden with his valuable file load in his car, but failed there to get a gasoline allotment for the onward journey to Berlin, where he was supposed to take the valuable file load. Thus, unable to drive, his car was caught without gasoline by the Allied annihilation attack on the baroque city on February 13, 1945.1 How many other repatriated vehicles failed to reach their destination is unknown to this day. 5triegau was occupied by Soviet troops on February 10, 1945, only three days after the evacuation order for the relocated Reichspatentamt, but was recaptured on March 11/12, 1945, by the 31st Volunteer 55 Panzer Grenadier Division >Bohemia and Moravia< under the command of Field Marshal 5chörner, which had only been formed in the same month.1 2 3 4-4 The 31st 55 Division, consisting of about 5000 men, was composed of training personnel who had been active on training and drill grounds in Bohemia and Moravia. The experienced members of this division represented something of a cross-section of the entire Waffen-55 and were equipped with a mixture of extremely modern and completely obsolete war materiel, as was common on training grounds. The two German divisions advanced toward the important rail junction at Bytom, which had been captured by the Russians to threaten the Soviets' flank. In their attack they had surprisingly easy game with the rather undisciplined Russian troops opposing them and occupied 5triegau without much difficulty. Alarmed, Marshal Konjev had his counterattacks multiplied to drive the Germans out of the recaptured Silesian territories, but without much result. Thus, Striegau remained in German hands until May 6, 1945. During their advance, the German soldiers found the bodies of 148 inhabitants, almost all of them girls and women who had been

raped before being murdered. The German troops were immediately followed by some patent examiners from Berlin to recover the 180,000 patent application files still remaining there. However, they could only report to Berlin that the Striegau field office had been largely destroyed by the undisciplined Soviet troops through arson and that the patent application files had been burned in the process. All patent office employees who could not escape from Striegau in time on February 10, 1945, were either shot

by the Red Army or disappeared. The Lower Silesian Patent Office in Jauer had also been evacuated in a rush to Eger in Bohemia and Moravia and from there later to Lichtenfels. Their last traces are said to have appeared near Bayrisch Eisenstein. Another evacuation of the Reich Patent Office was located at Heringen an der Werra. From mid-January 1944 to February 2, 1945, the largest parts of the library from Berlin, important secret files and personnel files were stored at a depth of 600 meters. While the library was still stored in secure packaging, the other material was provisionally brought down into the mine due to lack of time. Most of the secret files and all of the personnel files in Heringen were supposedly destroyed in time before the invasion of the U.S. troops, but not everything. When the American Joint Intelligence Objectives Team< investigated the mine, it was doubtful that the secret files could be >saved< because the Germans had piled liquid oxygen bottles on top of the files in the mine depot. The Americans determined that the documents were legible, but were in such poor condition that they would probably disintegrate when transported to the surface. They therefore lowered special photographic equipment with an operating m^mschaft down the shaft, which then filmed the complete patents for the U.S..1 After the later withdrawal of U.S. forces, Heringen came under Soviet control, and Russian troops were still able to recover important secret files on rocket technology from the salt mine. Apparently, the Americans also took the Patent Office volumes and journals from Heringen beforehand. However, they were not considered important enough, so they were left in Germany. They later formed the basis of the library of the German Patent Office in Munich from 1949. Now the events of the war finally spread to the German Patent Office in Berlin. On April 27, 1945, the building fell into Soviet hands. After the Russians had first set up a military hospital in the building for their soldiers wounded in the battle for Berlin, on the evening of

they set several fires on the evening of May 8. Fortunately, the fire could be extinguished, so that on May 9 the first patent officials could return to the Reich Patent Office to resume work on the orders of a Soviet officer. They were to prepare a complete set of the existing German patent specifications for removal to the USSR. However, either on purpose or by mistake, the most important files were left unattended in the back basement of the building. These were duplicates of the 180,000 patent applications that had been destroyed in Striegau in February. The complete, extremely important trademark file, which had been stored in Lindenstrasse in Berlin, was also overlooked by the Soviets or the German officials working on their orders. Since the Reich Patent Office was located in the American sector, the first American specialists arrived as early as June 2, 1945. Now a different wind was blowing in the time-honored building. Colonel Richard Spencer, who had worked in his civilian job at the patent office in Chicago, had all the files examined. Colonel Spencer knew how important the patent registration files were. He had all the existing important files photographed. In the first month, 30,000 meters of microfilm were photographed and shipped to the USA. The merciless US specialists were able to send another 3,000 tons of patent material to the USA over the next few months. The president of the Reich Patent Office, Dr. Reich, was ordered by the BIOS subcommittee to have extracts made from all German patent applications. As far as is known, about 145,000 of the 180,000 second applications of the Patent Office were registered, cataloged and compiled in 22 large volumes. Simultaneously with this plundering action, the Reich Patent Office in Berlin was closed and all German patents and trademarks, regardless of where they were valid, were expropriated. Because the

Reich Patent Office was closed, no new inventions could be protected. On July 26, 1946, 28 states agreed in London to grant their own citizens permanent licenses for all German patents and trademarks. In practice, this meant that German companies were not allowed to sell their own products in these countries if they bore their own trademark and originated from their own inventions. Only the neutral states of Sweden, Switzerland, Spain and Portugal had not joined this collective mass robbery, but even this had no practical significance, because license fees had to be paid for patents and trademarks on an ongoing basis, and no German was allocated foreign currency by the victors for this purpose. The damage was unimaginable. We will deal with this further on. Up to now, the victorious powers confiscated 346000 German patents after the war, of which about 200000 were foreign patents and 146000 domestic patents. In addition, there were 20870 German trademarks and 50000 new color formulas that IG-Farben had not yet been able to register with the patent office. However, new research has brought to light three documents1 from the >Office of Technical Services< dated April 2, 1947, according to which these high figures, assumed by doubters to be fantasy, were still much too low. In this document it is about a request of the company Hammill u. Gillespie for German patents. The U.S. office wrote, "they will probably be interested to learn that single copies for practically all German patents issued up to the last day of the war are set up in a total compilation in the Commerce Building. The compilations of German patents were seized in the Berlin Patent Office and evacuated to the United States in the spring of 1946. German patent number 750986 was the last of the series. Photostatic copies of these patents can be ordered from the OS Patent Office for 20 cents per page." This officially proves that not 344600 but 750986 patents were stolen from the Berlin Patent Office by the USA. But this still did not include the patents which were not made available to the public. Siemens alone lost 25,000 patents, large quantities of drawings and design plans to the victors, which weighed even more heavily than the other total damage to the company of 2.58 billion Reichsmark1 caused by the events of the war. In addition, the Americans captured a further 146,000 patent proposals that were still awaiting official recognition.1 How many of these were later granted a patent as an original American invention for the first time? The train of exploitation still did not end there. Even after the war, England demanded the free delivery of all German patents that had been patented in the years after the war.2 The former German Chancellor Konrad Aoenauer therefore expressed himself in despair at a CDU state meeting in the Rhineland, according to a report in the Westfälische Nachrichten newspaper on January 11, 1947: "By handing over these patents and inventions, the German people have in reality already made a reparation payment such as no nation in the world has ever made in such an amount. As we will see later, the re-establishment of the German Patent Office in Munich on October 1, 1949 did not mark the end of the exploitation of new German inventions by the former Allies. The Treasure Castle At Bad Culberg (Thuringia), a treasure of a special kind fell into the hands of American special commandos at Veste Heldberg.4 It was 204 cubic meters of files of the RLM (Reich Aviation Ministry). These important papers were shipped to the USA in sacks. Among them was information on the latest developments of the Krieghoff company in Suhl in the field of air armament and other technical developments, which promised the heiresses a years-long armament advantage in the technical field. This was all the more interesting because these documents were also located in an area that had been assigned to the Russians as an occupation zone. The >Air Documents Research Center< Whatever else the Germans had tried before the end of the war to hide their manufacturing secrets, equipment and documents from Allied access, they were soon exposed and sent to Kassei or Hanau for packing. From there, they continued on to London. Documents on the various Luftwaffe objects were discovered by the ton. These included some from the German Patent Office in Berlin, from Albert Speer's Ministry of Armaments, and many a document on the development of the V-1 and V-2 and the German jet fighters. Everything piled up in such large quantities that a special course of action was developed to

analyze the incoming material. In June 1945, the >Air Documents Research Center< was founded in London. There, all documents related to >Aviation< were collected from the American and British occupation zones in Germany and Austria. In a period of only three months, 111,000 tons of captured documents were flown from Germany to the evaluation center. Army and Navy personnel who spoke fluent German separated the documents into technical and non-technical categories. The non-technical documentation was distributed to interested agencies, and the technical documents were given special scrutiny, cataloged, and then microfilmed. Separate technical libraries were established for prominent manufacturing and research companies such as Messerschmitt, BMW, Daimler-Benz, and Junkers. Helping in this process were distinguished American scientists and aeronautical engineers from every university in the United States. From the >Air Documents Research Center<, the technical material was then passed on to government agencies, research centers, universities, and private industry.1 Was everyone found? The Secret Microfilm Hideouts of Southern Germany Although nothing was left undone and even the lowest corner of occupied Germany was swept upward, doubts remain to this day as to whether everything was found afterwards.

One report that points in this direction deals with the incredible extent of microfilming, as reported to the .Allies by German prisoner of war Kurt KREiTZFELD. KREmzFELD wrote that an agency had been established in Berlin specifically for the microfilming of important technical and political papers under the control of Colonel Sauer, which had its office at 88 Potsdamer Strasse. The agency had then come under the control of Speer's Armaments Ministry, but had also copied all the important papers of the SS Main Office. After the first heavy attacks on Berlin in 1943, it was decided to hide three or more series of copies at various distribution points, probably in southern Germany. Redselig then also stated Kurt Kreutzfeld that the colonels KNEMEYER and Diesing (RLM) as well as Geist (SPEER Ministry) would have to know the location of one 'Or more hiding places. The BIOS report stated that this information had been passed on to British Air Force Intelligence, which would look into the matter.1 Whether and how many of these microfilm hideouts in Germany, Austria, and what is now the Czech Republic were ever found after 1945 has remained unknown to this day. Secret to this day, the files of the Reichspostforschungsanstalt (RPF) The RPF, founded on January 1, 1937, by Reichspostforschungsminister

Dr. Ohn^rge, the Reichspostforschungsanstalt (RPF) was one of the most enigmatic and, at the time, probably also one of the most important technology forges of the Third Reich. Even when it was founded, it was concerned with the technical development of television sets and the testing of new types of broadband cable for television use. The RPF originally planned to build >model facilities< for television transmitters on the Brocken as well as the Feldberg and to construct mobile television transmitters. At the end of the war, the Reichspostforschungsanstalt eventually comprised 50 subject areas. They were concerned with high-frequency technology and atomic physics for military and industrial purposes, radio measurement (radar programs), television-supported rocket and tank control, defense against enemy bombers, infrared night-vision devices, tracking methods, ionosphere research, radiation measurement, eavesdropping technology, and encoding and decoding of secret codes. It is interesting to note that the Reichspostforschungsanstalt also worked in areas in which, according to the official historiography prevalent today, the Allies were decisively superior to the Germans: High-frequency technology, radar, atomic physics, and espionage. By the end of the war, most of the RPF departments had been relocated to western parts of the Reich. Most of the file material with 750 patent cases survived the war in the basement of the >Deutschlandhaus<, the Berlin radio building on Masuren-Allee. However, important factual files on research and notes on the arrangements with the commissioners of the Wehrmacht parts did not survive. They fell into the hands of the Allies at the end of the war and are said to be partly still in the custody of the NSA (National Security Agency) at Fort G.

Meade (Maryland) as former secret wartime documents. The only exceptions are BIOS, FIAT, and CIOS reports based on inspection and interrogation at RPF sites in southern and western Germany. The CIOS report "Establishments of the Forschungsanstalt der deutschen Reichspost" is authoritative here. It includes detailed information on the establishment, relocation as well as publication lists, documents and technical inventories with drawings as well as interrogations of scientists about their research results.1 However, only 9 of 23 alternative sites in the western zones are mentioned. This also shows how much may have been omitted here. Even from the little that is known, it is clear that RPF research results helped lay the groundwork for major advances in the world of radio and radiometry in the postwar period. Many of the former RPF scientists continued to work on most of the same topics after 1945, only under different foreign clients. In search of Kammler's SS treasure: armed U.S. expedition to Czechoslovakia in 1946 German research during World War II had a complicated administration and was constantly changing in its organization. The more the war progressed, the more the SS was able to secure its control over important areas of German research. The SS never considered it important to inform the German Patent Office of the discoveries and scientific advances of the institutions and their protection. SS General Dr. Hans Kammler had created his own organization, the KAMMLER Group, for this purpose, bypassing the usual industrial, scientific, and military channels. Its function can most readily be compared to a think tank of today. 5It was located at the 5koda works in Prague. Kammler's organization collected potential war-deciding ideas. No matter how much the proposals deviated from conventional thought, the 55 had them researched and examined for their practical feasibility. Without bothering about the other German research institutions, the ideas were developed to completion, and then the manufacture of the appropriate device was coordinated with a suitable industrial firm and brought to the front-' The 20-year >protection of inventors< granted by customary patents was regarded as a braid of the past and considered unnecessary. The entire 5creation chain from inventor to distribution to front-line troops was under the control of Himmler's men. In addition to 55research, there were a number of individual inventors with their respective laboratories spread throughout the German Reich's area of power. When the war ended, their scientific findings were collected by known or unknown institutions. It should hardly be a secret that in some cases the KAMMLER group was behind it. By the end of the war, a whole new research, production, and control structure for scientific knowledge had emerged in this way, bypassing or replacing the normal channels of German research. At the end of its active period, the KAMMLER group thus sat on a huge 5chatz of microfilms containing knowledge of the most revolutionary German research secrets. These included atomic technologies for aircraft propulsion and guided missiles, cyclotrons, and laser projects.1 Hans Kammler's secrecy was so successful that the Allies had no idea of the KAMMLER Group when they invaded Germany in the spring of 1945. The 55-general was known to them until then only as an important man in rocket armament. As the general told his wife, the Americans had also already made him an offer to set up a rocket industry in the U5A. To all appearances, Kammler was killed at the end of the war. When it was finally learned in July 1945 from the head of the Reich Research Council, Prof. Dr. Osenberc, that there was still a parallel SS think tank for modern technology under Kammler, the Western Allies kept their findings about Kammler secret as best they could. In this way, they did not want to draw unnecessary attention to the Soviets, in whose sphere of influence Kammler's former headquarters had been located. Even the name Hans Kammler was banned from official files as much as possible. However, Kammler had also made contact with the Soviets before the end of the war because he did not trust the Americans. As a result, the West and the East have been playing a cat-and-mouse game to this day over Kammler and his (alleged) whereabouts. Official American fact-finding missions to the Skoda plants, which had been under Soviet control since May 1945, revealed only a few alarming facts. Inane behavior by the commanding U.S. officer had previously led to the handover of crucial files on German

rocket research to the Russians when the Skoda plants were handed over by the U.S. Army to the Soviets.1 At least two U.S. intelligence missions were subsequently sent to Skoda, but despite cooperative German and Czech Skoda employees, they were unable to obtain more detailed findings because of close surveillance by Eastern intelligence officers. The relevant intelligence information about this period remains largely >blacked out< to this day. However, researcher Henry Stevens discovered on a legible page of the U.S. government microfilm in question that a search for 2.5 million Skoda records on microfilm in three caves immediately east of Srbsko (L-5863) was suggested there, in case the Americans were not satisfied with the completeness of previous searches. Unfortunately, what was meant by "not satisfied" remains hidden under redaction to this day. It must have been very important things, which are to be concealed from the public until today. So the Americans had not forgotten the treasure of the KAMMLER group, they just did not know how to get down to it. This suddenly changed when on October 13, 1945, five months after the end of hostilities in Europe, the French Embassy in Prague informed the Czechoslovak Foreign Ministry that an SS officer in a French prison camp had given them the information that there was a hiding place of secret documents near Prague. This hiding place was in the form of a tunnel in which 32 boxes of secret documents were hidden. They were wired with mines by the SS before the entrance to the tunnel was sealed. The French therefore offered the Czechs their services and all the information they had obtained from SS officer Günther Achenbach. But even after months of waiting, Paris received no response from the Czechoslovak Foreign Ministry. Somehow the Americans then got wind of this information and also got hold of the details of Achenbach's testimony. Incredibly, on February 13, 1946, in the midst of peace, the U.S. mounted an armed mission to Czechoslovakia, recovered the microfilm boxes, and, despite being discovered by the Czechoslovak authorities, escaped unharmed with their loot back into occupied Germany.

Naturally, Czechoslovakia reacted with indignation because of this violation of international law and, in addition to an apology from the Americans, demanded the return of the former German documents stolen from its sovereign territory.1 The Americans then also formally apologized for their armed invasion and returned material taken to the Czechs. However, it can be safely assumed that the microfilm documents for which the expedition was undertaken were not among them. For the economic

post-war exploitation by the USA, prey documents such as the microfilms of the KAMMLER group taken from Czechoslovakia had the great advantage that they did not have any>fingerprints< such as an official patent connection or other applications, so that the most revolutionary inventions (such as laser technology) could now be handled completely undisturbed as one saw fit. This was especially important when such findings had to be kept secret for decades until their >re-discovery< or had to be kept from the public for the time being. However, it looks as if the armed U.S. raiders did not get hold of all the material that existed about the KAMMLERGruppe. Already the published fragment of the institutional report on the Skoda Works from the summer of 1945 speaks about three underground hiding places. In February 1946, however, only one was cleared out. Already in the book Atomziel New York (Atomic Destination New York), I published, together with Thomas Mehner, the testimony of a witness, according to which 2.5 tons of most valuable archive material, intact and protected from foreign access, are still hidden in a secret depot today.1 The lost >Amber Room of Technology< In March 1992, the library of the Dresden University of Technology acquired the complete specialist library of the former GDR's Interflug airline, which was in liquidation.2 With about 14,000 titles, it comprised almost the entire aviation literature of the GDR. Upon closer inspection of the holdings, the experts at the Technical University of Dresden discovered a small sensation. 400 books of the stock were rare and unique works. It was literature that appeared between the turn of the century and 1945 and is only

rarely available in publicly accessible libraries. These included numerous reports on German aeronautical research, including aerodynamic studies in the wind tunnel, flow measurements at high speeds, and experiments on material strength. However, there were also 70 historically unique books among them, including two 19th century titles and 63 books from the period up to 1914 on general aviation, flight technology and balloon/airship travel. Examples were Luftreisen after the translation by Hermann Masius from Leipzig in 1872, Der Betrieb und Bau von Walzluftschiffen by Basenach (Leipzig-Munich-Berlin 1905) and the essay Der Einfluß der Flügelform aufdie Flugart der Vögel by Gustav Lilienthal, Qtto Lilienthal's brother. The ownership stamps of these 400 books clearly documented that they came from the former library of the Junkers-Werke in Dessau, from where they went to the Soviet Union and then came back to Dresden to the research center of the aviation industry of the GDR. From there, they were finally handed over to the Interflug library. Finally, the experts had found a trace of the >Junkers Library<, which had long been considered lost and had been intensively searched for by various people. Because of its value, it was called the >Amber Room of Technology<.3-4 Representatives of the Allied intelligence services had already targeted the Junkers-Werke in Dessau during the war. During the Third Reich, Junkers-Werke had grown to become one of the most important German armaments companies. Intensive research was carried out here on the development of aircraft and the most advanced engines. Shortly after Germany's surrender, therefore, a group of American aviation experts was flown into Dessau, which had been conquered shortly before, including the prominent Atlantic aviator Charles Lindbergh. Lindbergh was no stranger to Dessau. Even before the war, he had visited and inspected the Junkers factories on several occasions. He also had a friendship with the former Reichsmarschall Hermann Göring. The Allies had enormous respect for the former German Air Force. One of their demands for the post-war period was therefore that Germany should never again be able to build up its own air force. Therefore, all books and reports in German libraries that might eventually be used to rebuild an air force were confiscated. Even though the Junkers-Werke was located in an area intended for surrender to the Russian troops, all books in the Junkers library, even if they were rare pre-war literature, were removed without delay and taken to the USA. This confiscation action affected not only the Junkers company, but also other institutions that had played an important role in the history of the German Air Force, such as the Focke-Wulff company, the German Academy of Aeronautical Research, the German Research Institute for Gliding, the Aeronautical Radio Research Institute, and of course the Reich Aviation Ministry itself. In the United States, according to Richard Eelis, the lead chief of the >Aeronautics Division<, the books and journals taken away on behalf of the U.S. Air Force were turned over to the American Library of Congress at Wright Field. The first shipment from Wright Field had included 9114 aviation books, periodicals, and articles. In addition, 18,000 otherpieces from a wide variety of Air Force literature were transferred to the Library of Congress. Thus, 27,000 individual writings from German aviation research were transferred to the Library of Congress. It seems that some of the books taken away from Germany have already disappeared into dark channels, because Charles Lindbergh alone is said to have taken 17,000 volumes from the Junkers Library to the USA. However, Charles Lindbergh was devoted to aviation and its further development throughout his life and certainly did not want to contribute to the disappearance of a historically unique stock of books of the highest scientific and cultural-historical importance. This is exactly what happened. In fact, after the transfer of the German aviation literature material reported by Richard Eells, the further trace of the >Amber Room of Technology< is lost. A walk-through in recent years revealed that, after reviewing two-thirds of the holdings of the aviation collection, only about a dozen volumes containing inscriptions of German aviation institutions remain in the U.S. Library of Congress. The copies of the former Junkers library now found in Dresden were books which, by chance, had just been lent out by Junkers engineers at the end of the war and were taken by them when they had

to work as specialists in the Soviet Union for several years after the war. These books were already of great interest because they provided information about the appearance of the >Junkers stocks<. The remaining 26000 or so books, journals and essays are still considered lost in the USA. Individual items have since resurfaced. However, in investigations such as those of the Dessau police chief Franz Masser, traces are repeatedly lost in the USA and Great Britain. Only the library of the American Congress and the American Air Force at Wright Field know what happened to the gems of aviation technology. It is striking that the Soviets, who are not exactly squeamish about German property, have returned all the books in their possession from the Junkers library to the GDR, while Germany's great Western ally is unwilling to provide information about the fate of the >Amber Room of Technology<. Speculation is that the historically valuable books have long since passed into the hands of private collectors in one way or another, as indicated by the appearance of individual items in the USA and England. Alternatively, it can be hoped that the collection is perhaps in a locked room somewhere in the USA and could one day be returned to its rightful owners. The city of Dessau would certainly be delighted with the return of its >Amber Room of Technology<. An astronomical amount of loot To this day, it is not known if an accurate count was ever made of how many documents were taken from Germany. Some documents of these consisted of more than a thousand pages others, such as patent applications, contained only one sheet. The American aerodynamicist von Karman mentioned that about three million documents, weighing 1500 tons, were sifted and microfilmed in Europe. They would have formed only the basis of the >Armed Services Technical Information Agency< (ASTlA), which later became the >Defense Technical Information Center< (DTIC).1 If one adds to this the 1554 tons of secret documents that the Americans took to the U.S. Aeronautical Research Institute at Wright Field (Ohio) and the approximately 6000 tons of files that, according to statements in the New York Times by leading officials such as John C. Green, the >Office of Technical Services< (OTS) processed, then the number of stolen pages reaches astronomical proportions.2-3,4-5 But that is not all, for a newly discovered document makes it clear that the quantities publicly admitted at the time were still too small and that it can be assumed that there were actually several tens of thousands of tons of paper that crossed the pond in one form or another in the two years after the war.6 Earlier articles such as the one already mentioned in Harper's magazine are thus fully confirmed.2 Even in 1957, it was

not yet succeeded in processing all the findings, and the unprocessed intellectual reparations from Germany filled large green boxes piled up to the ceiling in the halls of the Library of Congress.1 One day it was all gone, without anyone ever knowing what ultimately happened to the contents of the boxes. Supposedly,

everything had been shipped back to Germany, questioners were told. B. Exploratory Reports. The merciless hunt for ideas and trade secrets Few subtle methods of the >liberators< The Anglo-American raiding parties were interested in anything that might have to do with the activities of the >targets< under review. These were not only the actual plans, documents, and samples of actual production, but also scientific studies, sample calculations, results of laboratory tests, test methods, technical literature, specialized catalogs, printed invoices, and even the names of customers and suppliers. German reports from this period are full of accounts of incidents in which the American investigators proceeded with very unsubtle, downright brutal methods.1 These included breaking into the homes of responsible persons in their absence or blowing up bank safe deposit boxes. At the Ernst Leitz company in Wetzlar, it even happened that American looters, who had considerable difficulties with the company representatives, resorted to >high pressure methods< (torture?) in order to subsequently get all the desired material handed over. The German >targets< were usually interrogated not by military policemen, but by their economic competitors or their emissaries, who had put on uniforms of the occupying armies for this purpose. A nightmare for the victims of such >robbery missions<. Even

companies that were majority-owned by foreigners, such as Brown-Boveri, had to hand over all documents requested by the Americans under threat of summary punishment according to Military Government Decree Number 1 (that is, up to and including the death penalty). Another popular method in the >World's Greatest Treasure Hunt<, according to a report in Nations Business, was to interrogate German industrialists about their factories, while former Russian forced laborers >helped< them refresh their memories.2 The English Guardian also reported on a >Scotland Yard< report, kept under wraps for years, that a notorious torture camp of the English CSDIC existed in Bad Nenndorf. After at first only members of the NSDAP and the "notorious SS" had been imprisoned, later "industrialists interested by the NSan patents and other documents of the most important industrial centers, but also in art treasures. On the one hand, it was individual soldiers who >helped themselves</ on a considerably larger scale, however, art was requisitioned on government orders, usually in the face of resistance from the specially assigned art officers of the U.S. Army. Similar activities took place throughout the U.S. occupation area. To this day, the whereabouts of numerous art objects remain unclear. The >Locusts List< of Summer 1945 Full of pride, the >Foreign Economic Administration (FEA) reported on July 29, 1945, that over 200 American technical experts were now in Germany to investigate Germany's technical industrial war secrets under the guidance of Foreign Economic Administrator Leo T. Crowley.2 Attached as evidence was a list of over 200 experts involved who had "profited from a wide variety of dictatorships. Maltreatment up to mock executions were the order of the day in Nenndorf. In order to make the really important leaders talkative, the interrogation center >Dustbin< (garbage can) had been created especially, where the former leading class of German industry and science could be held indefinitely for the exploitation of their knowledge. Only by good and unlimited cooperation could the inmates of this interrogation camp hope to put an end to the degrading circumstances of their forced stay. In the process, however, comical incidents occurred, as in the case of the rocket scientist Überth. After Professor Überth had enthusiastically told his Allied interrogator about the latest German findings and plans for ramjet aircraft, the interrogator considered him a fantasist and ordered his immediate release home. The Fast Bird Catches the Worm American teams had few scruples when it came to preying on competition with their former confederates. One U.S. team, for example, went to the MAN factories in Augsburg, where they found a materials testing laboratory that the British had already claimed for themselves. U.S. Navy specialists nevertheless disassembled it and took it away for use at the Navy's David W. Taylor Model Basin facility in Carderock, Maryland. In a great hurry, U.S. gripper teams went to the Buna S (synthetic plastic) plant in Skopau, Thuringia, the Zeiss Works, and the Schott Glass Works in Jena. There they searched for skilled workers, equipment and materials to take west or to the U.S. before the Russians could take over the area in June 1945. Other Americans rushed to the IG Farben complex (Wolfen) near Bitterfeld in Thuringia, where they found researchers working in the fields of paints, dyes, insecticides, soap, poison gases, synthetic jewels for ball bearings, aerial photography, synthetic nylon for parachutes and aircraft tires, and numerous other fields. Again, people and materials were taken immediately. Quick action was considered the order of the day. A dark chapter of the brief U.S. stay in Mecklenburg, Saxony-Anhalt, Saxony and Thuringia is that the Americans were drawn not only in large measure from American industry, the university and insurance sectors, but also to such war-decisive enterprises as the public enterprises of the city of New York. Almost, this list reads like the >who is wllo< of American industry. No one wanted to be left out when it came to acquiring and implementing German inventions. Today, according to modern usage, we would easily call these people a >swarm of locusts<. At that time, their activities were still called industrial war secrets<, probably to give the whole thing a semblance of legality. After all, they were still at war with Japan. Only later, on August 25, 1945, the then U.S. President Harry S. Truman legalized the appropriation of the entire scientific and industrial technology

of the "enemy". The >Locusts< list is also interesting in that it proudly mentions captured developments that cannot yet be properly classified today. These included an airplane with a service ceiling that exceeded by several thousand feet any American airplane (DFS 228, DFS/ Sänger Orbital Bomber, F. G.), new tubes for X-ray radiation for cancer therapy and for "industrial purposes" (whatever was to be understood by this), and information about novel high-temperature alloys (rockets/space flight, F.G.).1 Everybody is Next to Himself It quite happened that American companies fought like hyenas over the German booty. Prof. John Gimbel found documents describing one such case.2 It involved a major controversy between two competing American firms that escalated to the intervention of a congressional committee. The chairman of one of these companies had gone to Germany on behalf of the OTS to conduct research on and provide reports on German developments in beryllium technology. When the man returned, the other two companies were sure that he had been using the information thus obtained in his own company long before the Publication Board was ready to release his report to the general public and thus to his competitors. It had already become apparent on other occasions that FIAT had no rules to control its agents. Of course, this was exploited to the company's own advantage. Often no reports were written at all, in case they could be of use to the American business competition, or some important things were left out in order to be able to exploit one's own exclusive knowledge from the surveys in Germany to the advantage of one's own company. This was clearly demonstrated when, after many years, the "Freedom of Information Act" made it possible for German companies to gain insight into the BIOS and CIOS reports that had been prepared about their companies during visits by the American competition. It turned out that the "reports" sometimes lacked important statements that the German interlocutors had provided. In this way, an interviewer could use important procedural processes solely for the benefit of his own company olme concern about the competition, because no one but the German interlocutors knew what they had really said or what documents had been taken. Apparently, some of the interrogators, who often came from the private sector, had no qualms about deceiving their country, on whose behalf they were traveling and from whose taxpayers they were also paid for their stay in Germany, for their own benefit.

for their own benefit. How the Allies Deceived Each Other It should be certain that neither the transfer of specialists nor the transfer of knowledge from Germany had any basis in international law and could not be derived from the concept of reparations. These were arbitrary acts influenced by greed, as evidenced by the fact that the Allies were often unwilling to share the results of this knowledge transfer. U.S. propaganda in the early postwar years operated on the argument that the information obtained was publicly available to all interested persons and countries. However, John Gimbel convincingly shows that the practice was different.1'2 Ultimately, the contest was over which occupying power could derive the greatest benefit from the seizures of German teclmology. This competition among the Allies for future economic advantage was openly discussed by the German leadership even in the last days of the Third Reich. Hans-Ulrich Rudel, for example, reported on a conversation he had with Adolf Hitler in the Reich Chancellery on April 19, 1945: ". - First of all, he [Hitler] explained in half an hour how decisive technical development had always been in the course of the centuries, in which we had a great lead, which now had to be carried through to the end and could still bring a positive turn for us. He tells me that the whole world

fears German technology and science, and shows me some information that indicates how the Allies are already preparing everything to cheat each other out of this technology and our scientists. . . "' An attempt by the Americans, planned down to the last detail, to single-handedly secure Hitler's secret air force technology as early as August 1944 in the event of an expected sudden German collapse, I have uncovered in my book, Betrayal at Normandy' . After the German surrender, the United States continued this policy. In the first few months, search parties from various U.S. weapons branches and

staffs, as well as British squads, competed with each other. This did not improve until the U.S.-British CIOS began to coordinate activities in July 1945. Although the joint U.S.-British teams were disbanded as early as July 1945, Anglo-American cooperation remained close, although the Americans worked much more effectively than the British and did not shy away from stealing key loot from the British zone anyway. Reference is made here to the abduction of the Peenemünde documents from the mine in Dörnten, the refusal to share the V-2 loot from Nordhausen with the British as agreed, and the clandestine dismantling of crucial components of the Volkenrode wind tunnel. In April 1945, American troops had also conquered areas that had been assigned to the Soviet occupation zone at the Yalta Conference. Before these zones were later handed over to the Red Army, U.S. special forces, as reported in the front, took valuable machinery and technical documents as well as scientists and technicians. For example, the Americans took more than 70 specialists from the IG Farben factories and 126 key specialists, archives and key technologies from the Zeiss and Schott optical factories in Jena. Attempts to poach specialists could be dangerous if the >personnel hunter< was German. In the spring of 1947, the former Peenemünde specialist Edgar Petersen contacted the V-2 scientist Heinrich Weygand. He wanted to convince his former subordinate to defect to the French. Petersen was arrested and taken to the interrogation center >Dustbin<. There he was "questioned in detail" about the whereabouts of missing Peenemünde documents and his activities on behalf of the French. What was meant by this should be obvious. Document from: RG 319 (Records of the Army StafO. Records of the Office of the Assistant Chief of Staff, G2, Intelligence. Security Classified Intelligence and Investigative Dossiers, 1939-76. Impersonal File. Entry 134A, Box 31: Folder: XE 152328, Soviet Recruitments of German Scientists. According to a report to Soviet intelligence chief Beriya on March 23, 1946, the Americans also abducted from the Soviet zone records on a total of 105000 patents. From the underground secret weapons factories at Nordhausen and Bleicherode, the U.S. Army drove off several hundred truck and wagonloads of technical equipment. Among them were the entire high-frequency technology, testing and measuring equipment, launching devices, and about a hundred complete V-2s. A report by the Nordhausen SED district executive committee mentions that all secret command equipment had been destroyed or transported away by the time the Russian occupation forces arrived. Nevertheless, the Americans had overlooked many devices in the hectic rush, and even the French had succeeded in having 9 wagons with complete V-l and important V-2 parts from Nordhausen transported to France before the area was handed over to the Russians. The Americans lived in constant fear that the French and Russians would try to poach German scientists from the U.S. zone. German specialists of military importance were gathered and closely guarded in Landshut (rockets), Heidenheim an der Brenz (Carl Zeiss and Schott), and other places, especially in Hesse. A denial program was adopted that prohibited German scientists registered there from leaving the U.S. zone without permission from American intelligence. This included not only scientists but also persons who possessed special individual knowledge such as technicians and military officers. The Anglo-Americans also tried to obtain specialists who were still in the Soviet zone. For this purpose, they introduced a joint >Enemy Personal Exploitation Section< in early 1946. This action, code-named >Matchbox< (matchbox), was intended to help German scientists and technicians in the Soviet zone to escape.1 The action, in which the best minds were to be won for the >well-being of the democracies, began too late, however, since the Russians had wisely taken the scientists and technicians of importance to them from Germany to the Soviet Union in October 1946. For its part, the Soviet Union tried to poach German scientists from the Western zones. Documents from Western Allied intelligence agencies confirm that these efforts were very successful and that by January 1946 the Russians had recruited many German scientific technicians from the Western zones. Soviet methods ranged from generous offers to threats to outright kidnappings. The Western Allied JIC lamented, "If this withdrawal is not stopped immediately, the Soviets may, in

the opinion of the committee, catch up with the United States within a short time in such fields as atomic research, guided missiles, and even overtake the United States in other fields of great military importance, including infrared technology, television, and jet propulsion. The help of German scientists would probably accelerate the development of a Soviet atomic bomb by several years. "1 ' The >long arm< knew no bounds As in modern times, after World War II it was no problem for the United States to exert pressure even on neutral states. In this case, it was a matter of using Swiss scientific and technical >know-how< that could be linked to supplies to Germany. Thus, in early June 1945, a group of AAF-SAG experts, i.e., American aeronautical scientists, went to Switzerland to visit Brown-Boveri's research facilities there.2 It had been determined that Brown-Boveri had supplied compressors and components for wind tunnel systems to Germany during the war. Now the (ab)bill was presented. What scientific consequences and business disadvantages Switzerland suffered from such >visits< has never been determined to this day. The white >M< In the first years after the end of the war, there were machines everywhere in Germany on which a large white >M< had been painted.1 They were the victims of the >multilateral actions<, according to which a certain number of machines were to be >taken< from German industry. It was >targeted< to be dismantled, and almost exclusively by so-called >industrial officers< who were experienced competitors of the Germans in private life. For example, at the Rheinische Röhrenwerke, two English officers were presented for dismantling as industrial officers, who happened to be senior engineers of the English firm Stewarts & Lloyds. The main purpose of the >M< actions was to take so-called >prototype plants< from German factories and to make these samples available to the English, French, and American competing industries. The American OTS reported in early December 1946 that American inspectors had already picked out and marked quite a few items for evacuation to the United States. The Department of Commerce had already received 2500 such items, ranging from half-pound chemical samples to machinery weighing 5 or 10 tons each. The report announced that such commodity samples and equipment would arrive in increasing numbers in the future. The OTS normally notified the appropriate trade and professional magazines, as well as any companies that were

were thought to be interested, as soon as any items from their area of interest or business sector arrived. The OTS also arranged for group testing of former German samples and exhibited them at government laboratories, scientific societies, trade associations, and sometimes private firms. The exhibition of van equipment at Fort Monroe, Virginia, in March 1946, was well known; it involved mainly diesel engines, locomotives, railroad equipment, and naval equipment of all kinds from the best-known German firms, from Daimler-Benz to MAN. A Commerce Department announcement on this exhibition noted that intellectual and scientific reparations of this kind allowed American firms to introduce new products or improve their old ones. This, it said, would cost Germany its previous leadership in some industries and techniques.1 Machine tools and equipment, as well as tenting equipment and plastic processing equipment, were on display at the Frankford Arsenal in Philadelphia from March 31 to May 2, 1947. Fifteen displays featured machinery and equipment of "novel design and operation." Of particular interest was a precision cutting machine made by the Ultra-Präzisionswerk in Aschaffenburg. The Germans had used the machine to produce complicated cylindrical shapes. It contained a novel optical system that allowed the operator to continuously compare his work with engineering blueprints as the work progressed. The machine attracted the interest of more than a thousand experts and led to nacWragen from Bausch & Lomb Opticals, the American >Jewel Watch Manufacturers Association< and the >National Machine Tool Builders Association< before the exhibition even opened. Another highlight of these exhibitions was the Bosch Company's capacitor machine, demonstrated at Western Electric in Chicago. OTS introduced it several times as an ingenious machine that would revolutionize the manufacture of capacitors for radios, automobile ignitions, hearing aids, radars, and other electrical

and electronic equipment. It would save the U.S. capacitor industry millions of dollars annually by producing capacitors that were 50 percent smaller and 40 percent cheaper than those previously manufactured in the United
States. It was brought to the United States at the suggestion of H. H. Sargeant, trustee for enemy property. He had seized the German patent for the machine and made it available to American manufacturers while the war was still on, only to learn that the expropriated patent information alone was insufficient to allow a manufacturer to reproduce the German machine. After the war ended, the machine was confiscated from the manufacturer Bosch GmbH in Stuttgart. One of the 12-ton monstrosities was immediately shipped to the United States to serve as an example of research and development. The OTS then made the rebuilt machine available to Western Electric and Bell Laboratories for demonstration purposes. As soon as it became known that the capacitor machine had arrived in the United States, 200 different companies expressed interest in it. By May 1948, the U.S. was ready to adopt the Bosch process for its own products. The >M< action was also used by Allied research officers to achieve targeted crippling of German production companies. This involved the targeted removal of individual key machines that were directly necessary for the manufacture of certain products and processes in order to exclude future competition from German rivals for years to come. This objective was also achieved. Mahle's magnesium injection molding machine: an example of American handling of technical loot American loot specialists discovered a magnesium injection molding machine in the Mahle works near Stuttgart, which subsequently revolutionized the American injection molding industry. The machine weighed 12 tons and produced magnesium housings of almost unbelievable precision and accuracy at a rate of 80 per hour. Thousands of such housings had been used for radio and radar cases during the war. They were much stronger and lighter than comparable American housings. li 2 The Americans found one of these machines, which they considered extremely complicated, and immediately shipped it to America. It was taken to the Frankford Arsenal in Pennsylvania and assembled there. The American Spri tzgußin stitut and its affiliated companies immediately showed the greatest interest in this machine and its excellent products, the manufacture of which had previously been considered impossible. The Institute agreed to provide as much technical personnel as was necessary to get the injection molding machine up and running again. Because of the allegedly poor condition of the equipment, however, this was no easy task. Documentary evidence shows that the American specialists balked at restoring the >dangerous< German machine. Thus, Dr. Alfred Bauer, the developer of the Mahle injection molding machine, was discovered and shipped to the United States. The Dow Chemical Company, which had located Bauer, had him brought to the United States via the U.S. Army. His departure for America appears to have been >relatively sudden<, as the Dow Company later sent him back to Germany so that he could wind up his personal business affairs and bring his family over. Dow even wanted to send Bauer back and forth on an expensive transatlantic flight at his own expense to avoid the inconvenient ship transportation that was common in the U.S. Army. Time was money. Thus, the revolutionization of the American injection molding industry by Dr. Bauer and the Mahle Company could take place. D) "Last call to Germany" or: when the "locusts" ran out of food... When after two years the essential patents and inventions were >sucked out<, the Anglo-American policy realized that the technology raid was an obstacle to the reconstruction of the occupied zones of West Germany as a bulwark against >evil communism<. The wind begins to turn: the >case of Austria Austria was not officially considered a former enemy state by the Allies after the end of the war, although its population had overwhelmingly agreed to annexation to the German Reich in 1938. However, this did not stop FIAT teams from sweeping everything in the country from the bottom up that promised interesting spoils. In September 1946, however, there were such massive protests from Austrian authorities that the examination and publication of processes, formulas and other industrial

secrets of Austrian industry were extremely harmful to the recovery of the country's economy. The U.S. and British inspection commissions for Austria therefore rejected the routine request of a FIAT team to enter the country. Outraged, FIAT appealed to the U.S. State Department. But since the State Department wanted to recognize Austria as a "liberated country" - not least to counter the threat of Russian influence in Austria - it supported the Control Commissions' decision. The Foreign Ministry decided that future requests for access to Austria by FIAT loot grabbers were to be limited only to those "industrial targets" that had previously been engaged in the production of actual war materials.1 Of course, FIAT could live with this decision, since in times of total war most firms in Austria were engaged in some war-related business< and only those firms whose products were of use to the Wehrmacht were allowed to produce at all. Nevertheless, FIAT had a dangerous precedent to consider here for the future. Fear of German Civilian Competition Reconstruction in the Western zones indispensably required the release of German civilian research in private companies. American firms and organizations feared strong competition here, and so the president of the >Scientific Apparatus makers of America< protested to the War Department against the mere intention of the occupation authorities in Germany to permit the production of civilian scientific equipment. President John M. Roberts referred to the "deep consternation" this proposal had caused among members of his industry. When Roberts wrote this on June 24, 1946, the point was not to allow German production until the commercial-industrial exploitation program was completed. The Hard Way to Stop Uncontrolled Theft It was clear to some American officials in occupied Germany that the search for patents, documents in the production process, and techniques was nothing more than uncontrolled theft.1 Among them was U.S. military governor General Lucius D. Clay. Clay wanted to limit the transfer of German technology to the U.S. to military goods and research results, and to military products that were to be exported by Americans in dollars or accounted for as reparations. To this end, Clay further insisted on a proper accounting of the value of patents and other taken
items. To the U.S. Department of Commerce, Clay had stated: "If we appropriate this information without keeping records, it would be the same as the Soviet taking from current production and the French reparations outside of reparations." As early as May 3, 1946, Governor Clay ordered that all scientific equipment and research items in FIAT's possession be blocked and not shipped to the United States until the material was designated as reparations. Clay met with little favor in Washington, however, especially when the influential John C. Green argued that the economic conversion of the American peacetime economy depended on free access to German technical and scientific knowledge. On June 29, 1946, the War Department ordered the OMGUS military government, and thus Governor Clay, to ship the blocked materials on the FIAT list immediately. A proper accounting could be made later an incredible operation that had nothing to do with law and order. On the list of June 29, 1946, there were 37 items, among others the already mentioned capacitor manufacturing machine of Bosch and die-cast equipment (injection molding) of Mahle-Werke (Stuttgart). In addition, an Ultra-Präzisionswerk drilling machine, the >Magnetophon<, the MAN materials testing laboratory, and other items and equipment of IG-Farben, Glöckner-Humboldt-Deutz, BMW, Messerschmitt, Friedrich Deckel, Adlerwerke, etc. were awaiting shipment. The American authorities in Washington, to Clay's chagrin, once again established FIAT's authority over OMGUS. This included letters of praise to FIAT signed by President Truman, which were hastily presented to the U.S. President while he was on the ship >USS Williamsburg<, and secured funding from the U.S. Congress for further FIAT action well into 1947. To the outside world, it looked as if everything would continue as before. Nevertheless, the "land of milk and honey" for the "locusts" began to be increasingly threatened. The Allied occupation officers were in charge here, working locally with German companies, chambers of commerce and German authorities to get the war-hit economy back on its feet. They had no sympathy

whatsoever for a continuation of the booty missions, which had been working purely for economic exploitation since Japan's surrender in August 1945. From the fall of 1946 onward, therefore, the American military government made it increasingly clear that it wanted to see an end to the FIAT and OTS exploitation programs. The U.S. Department of Commerce panicked when it heard that OMGUS would stop the FIAT program in the spring of 1947, despite active support from Congress and the President. Jolm C. Green therefore published an article, "Last Call for Germany," in the Federal Science Progress, the official organ of the OTS, in February 1947. In it, he expressed the belief that it would be a national tragedy for the United States if the gates of access to Germany were allowed to be closed before the best of German technological knowledge had been appropriated. He lamented that the OMGUS planned program stop on March 31, 1947, would conflict with other plans to continue missions through the end of the year. He urged the Department of Commerce, the scientific and technological press, and the National Association of Manufacturers to take advantage of this last opportunity to grab the unique information in Germany. If the program did indeed stop in March, as planned, problems would arise with major corporations such as Texaco, Upjohn, Colgate-Palmolive, Pittsburgh-Steel, and the Standard Oil Development Company, which had even larger forays into Germany planned, Green said. Green's influence, however, was now rapidly coming to an end. Clay had joined forces with the English, who also wanted to put an end to booty missions in their zone. Fortunately for Cla y and German industry, a new Congress had come into office in the USA. Green's influence on this newly elected Congress quickly waned. The House Appropriations Committee cut the appropriations to the OTS by half and proposed to transfer its activities to the Bureau of Standards or the Patent Office. This would have meant the end of the OTS's activities. Green, however, succeeded in influencing another committee to give the Department of Commerce funds to continue the overseas program after June 30, 1947. General Clay, however, had now had enough. He notified the War Department that he would terminate FIAT operations in Germany on 30 June 1947 unless he received a contrary order from the War Department to do so. That order did not come, and so the uncontrolled theft of intellectual property, unprecedented in the history of the world, officially ended the following day. However, Allied interference and restrictions on German research continued for many years. 1948: Death Penalty for Silent Inventors By the end of the FIAT missions, the former Allies had largely succeeded in getting their hands on all available German intellectual property of economic value. However, American and British industry now needed time to understand, integrate, and replicate the German technical knowledge thus transferred or to initiate the possible further developments. In order to gain this time, it was important to prevent German researchers, unless they were in Allied service under Operation >Paperdip<, from building on their technological knowledge and scientific expertise acquired before May 1945 and consequently from developing new products more quickly than was possible for the Anglo-American competition, which first had to make the technology, some of which was completely new to them, usable for their purposes. Here, too, the victors had taken precautions, since Control Council Laws No. 2 and No. 25 not only stipulated the delivery of all patent documents, but also meant that there was no longer a German Patent Office. It was not until July 28, 1948, that the first German post-war patent was issued as number 800001. Thus, the lack of patent protection already made new developments impossible, quite apart from the fact that there was hardly any money left for them. Immediately after the end of the war, all German companies, regardless of whether they were of military importance or not, were occupied and were not allowed to resume work without permission from the Allies. All German research and development was completely forbidden for the time being. And when this ban was >mitigated<, it concerned "any research and development that could lead to the resurrection of the German war machine." With this rubber term, all important modern research could be suppressed at that time. German firms and research institutes authorized to conduct research under

Control Council Law ACC Blanc Number 25 were required to submit quarterly reports to the >American Research Control Officer< in charge of them even after the FIAT missions ended. When the Americans realized that the Germans were very reluctant to do this, for understandable reasons, they resorted to radical measures. After the Allies had received research reports that were still insufficiently detailed, in April 1948, on the occasion of the festive ceremony in honor of the inauguration of the Max Planck Society, the highest Chief Research Control Officer of the Military Government OMGUS, Carl H. Nordstrom, informed the German Länderrat Committee that the Military Government OMGUS would resort to punitive measures if better and more reliable research reports were not received soon. He said that the ACC Act here set the stage for imposing sanctions, up to and including the death penalty, for refusals or insufficient reporting of German scientific research. He would only wait until June 1, 1948, and then take action if there was no improvement in the quarterly reports by then.1'2 Unfortunately, there is no record today of whether the research reports improved as a result and whether and what penalties were carried out a curious silence. It appears, however, that a "solution satisfactory to Americans" was found. Research by John Gimbel then also revealed that the research reports had indeed continued to serve American industry as a basis for industrial espionage from 1947 onward. Thus, the German fears were not plucked out of the air, although the Research Control Officers made promises regarding the confidentiality of the reports given to them. Although some of the research officers behaved honorably, their knowledge was subsequently misappropriated by higher authorities and made available to American industry. The result of all this was that the recovery of the German economy was set back by years. And even if German industry gained world renown in the post-war years through the so-called >economic miracle<, Germany was unable to resume the leading scientific role it had held until the mid-1940s because of the coercive measures taken by the victors.

Too good to quit: the successors to ClOS and FIAT With the end of the FIAT missions in 1947, there was only an apparent official end to the exploitation missions. As early as 1945, the Joint Chiefs of Staff (JCS) had established the Joint Intelligence Objectives Agency< (JIOA). The JIOA was given direct responsibility for the deployment of German scientists taken to the United States (>Overcast< and >Paperclip<) and had as another area of operation the collection, declassification, and distribution of CIOSand FIAT reports on German scientific and industrial targets. After the cessation of CIOSand FIAT activities in 1947, >Big Brothen. The United States maintained target and watch lists of important German and Austrian scientists at JIOA as late as the 1950s. In these, in addition to a scientific assignment, dossiers were also created on the political views of the >targets<. Document from: RG 319 (Records of the Army Staff). Records of the Office of the Assistant Chief of Staff, G2, Intelligence. Security Classified Intelligence and Investigative Dossiers, 1 939-76 Impersonal File. Entry 1 34A, Box 31: Folder: 02/006 430 Immigration of Austrian Scientists to Soviet Zone. the JIOA stepped in and continued their activities. The JIOA was not dissolved until 1962. This means that for the exploitation of intellectual property taken from Germany, it was obviously necessary to maintain the corresponding official structures until the 1960s. E. Scientists Imported Like Goods: the Systematic Transfer of Living Knowledge 1945-1949 The Great >Target< Hunt Begins In addition to appropriating German patents, trademarks, and industrial equipment, the Allied looters of the CIOSand T-Forces were interested in the German intellectual elite who had made and applied all this invention and research. In fact, the Allied booty forces had a mission to prevent the German intelligentsia from possibly fleeing abroad. In fact, it had soon been discovered that it was insufficient to seize documents, material samples, trademarks, patent specifications, and machines as long as the basic principles and specialized knowledge behind them had not yet been developed to that extent in their own countries. A major blow was struck by a U.S. special unit composed of agents, scientists and technicians when they captured the head of the Reich Research Council, Dr. Werner üsenberg, along with 150 of his closest

associates in Lindau. Thus they came into possession of lists on which the names of some 15000 of the leading German scientists and technicians were recorded. This success of the American ALSOS troops led to the Americans trying to seize all the members of the intellectual elite of the German Reich listed on the lists. The English, Russians and French could only dream of this. Those in whom the Americans were particularly interested were segregated and subjected to more intensive interrogation in special facilities. Some of the American interrogators proved not to be up to their role. For example, the leading rocket scientist, Überth, as I said, was immediately classified as a fantasist by his Allied interrogator when he told him about ramjet aircraft, and was promptly dismissed from the notorious >Dustbin< interrogation center and sent home. Another American specialist, after reviewing the research results of Prof. Dr. Eugen Sänger, the inventor of the space glider, found that his work was not worthy of further study. Sänger seems to have been so bitter about this that a few years later, when the United States tried to lure him over Wernher von Braun and Dornberger, he categorically refused to ever work in the United States. Also, because of apparent insignificance, the German rocket scientist Goeitrup was allowed to travel back to the Soviet zone, where he later became the backbone of early Russian rocket development. On the whole, however, the precisely planned and rigorously executed professional hunt for representatives of the German technical intelligentsia was of unprecedented success. It succeeded in securing the help of thousands of German scientists, skilled workers, and intellectuals. These were also referred to as >Zielscheiben< (targets) by the Allied hunting commandos. As we shall see further, the claim made in the mainstream literature on the Third Reich that the German intellectual elite left Germany or went into exile after the National Socialists came to power in January 1933 can no longer be sustained. One must rather consider whether Germany did not suffer the bloodletting of the majority of its outstanding scientists and researchers only after the capitulation in 1945, as Claus Nordbruch wrote.1 Legitimate Human Spoils The United States was able to secure the lion's share of living knowledge<. This is irrefutably certain today. Immediately after the end of the war, the scientific import program >Overcast< was started by the Americans and officially decided in July 1945. In March 1946, this became >Operation Paperclip<. The other former allies also had their own transfer programs for living knowledge< such as the English >Darwin Panel Scheme< or the Russian >Ossawakim<. The >Operation Paperclip< had its name after the riders on the cards of the wanted in an archive that had been built up mainly with the help of German immigrants already since 1936, long before the war. Whatever "scientific-technical prominence" was listed here was to be investigated and secured.2 Above all, the selection was about people with >potential for technology transfer? Interestingly, the Germans learned of these Allied intentions as early as 1944. Thus, as early as the summer of 1944, Allied counterintelligence services intercepted a message from the Japanese naval attaché in Berlin, who reported to Tokyo that the Americans intended to bring at least 20,000 German engineers and scientists to the U.S. after their victory over Germany in order to use their knowledge and skills. Hitler also spoke to Colonel Rudel in April 1945 of these efforts by the victorious powers.1'2 After 1945, this Allied hunt for >living knowledge< was as successful as the hunt for documents. A spokesman for the U.S. Department of Defense announced in February 1950 that no fewer than 24000 German researchers and technicians had been "questioned at length" and of these, 523 had been brought to the United States as "possessors of expertise not otherwise available." Of this group, 362 were "invited" to take steps toward naturalization in the United States. 60 people were too important to let return to Germany. What to make of these figures will be presented later. These >foreign assignments< were not always on a voluntary basis. If German scientists and technicians were considered important enough, they were kidnapped and forcibly abducted not only by the Russians. The so-called democratic powers USA and England did not proceed differently. The victorious powers regarded the Germans as legitimate "human prey. "3 By taking over the German scientists, the Allies violated their own laws.

Not only Americans, but also British, French, Russians, Australians, Canadians and other countries took German specialists into their service. Between 2000 and 3000 specialists emigrated to France. The number of German specialists in Great Britain is estimated at 800 to 1000. To southern France, Australia, New Zealand, South Africa, Canada, Spain and other countries, specialists emigrated in the order of about 600 persons. The lion's share of >living< knowledge went to the USA. In the USA, public agitation soon arose because of the presence of the German experts. There was criticism both among the own population and military personnel, but especially from American scientists who protested against the German competition. All countered that by taking on the German scientists, the U.S. government had violated American law and applicable norms, although it was precisely responsible for upholding that law. The benefits of the German scientists and technicians were clearly set forth by U.S. Secretary of Commerce Henry A. Wallace in a memorandum to President Truman on December 4, 1945. Wallace stated that the use of top German experts was wise and logical, since such a transfer would only benefit American science and industry. The U.S. should not dispense with the technical expertise of the Germans because of their technical leadership in the world in terms of expected profit and, above all, because of their military superiority. The fields of work of the >guests< included practically everything of military and civilian interest: from electronic miniaturization to ceramics, underwater medicine, and optics, from aerodynamics and atomic physics to polymer liquefaction and new methods of petroleum refining. We will look at some of these examples in more detail. As early as May 1949, the initiator of >Operation Paperclip<, Captain Bosquet N. Wey, who also directed the >importation and distribution< of the German scientists, stated that the work done by these had by then saved the U.S. at least $1000 million in armaments expenditures and at least ten years of development time. The German scientists, however, did not see much of these four billion D-marks (according to 1949 calculations!): According to a statement made by the U.S. Army to the foreign press in Frankfurt/M. on May 15, 1947, the experts in the U.S. received $6 a day for their own consumption. Their families, who were housed in a camp near Landshut, received special rations of 2300 calories daily, heating material, and clothing. In addition, $5 to $10 was paid out in Reichsmarks. In total, therefore, world-famous scholars and designers earned $11 to $16 a day, while at that time American steelworkers and American miners were already receiving $25 to $35 a day. It was not until later that it was discovered that the U.S. could not continue to do without its imported German scientists despite its own progress, and attempts were made to motivate the German specialists internally with financially lucrative and permissive contracts. A Nobel Prize winner protests against unfair poaching methods Prof. Dr. Otto Hahn was one of the world's best-known and most respected scientists in the 1940s. In the Third Reich he was considered >politically unreliable Otto Hahn wrote in his book My Life:1 "With great concern I regarded the emigration of German scientists to the USA. In order to protest against the methods of the Americans, who directed this flow of the German scientific elite by >inviting< them to their country, I published an article in the Göttingen University Newspaper on February 22, 1946, together with Prof. Hermann Rein. Einstein, Franck, Pringsheim, Eyerhof and many colleagues received offprints, and the replies were mostly approving. Even two American professors who were visiting Rein expressed their satisfaction with the article." This reaction was perfectly clear, since American scientists were not eager to bring >competition into their own house< who would rival them in the competition for the high-paying posts in research, industry, and the military. Otto Hahn continued: "The reaction of those to whom our statement was addressed was quite different. From Heidelberg, the seat of the American military government, came the news by return of post that the military government was very displeased with us. An American officer appeared before Dr. Fraser [Otto Hahn's English overseer] to complain, since our article had also become known in Washington and would trigger corresponding reactions there. .. This debate was followed by further excited arguments with other American officers

who were responsible for German research.... ." This shows how struck the American authorities reacted and how important the >disturbed import< of German living intellectual knowledge was to them. Unfortunately, Hahn did not address in his book the methods of the Americans that disturbed him. Nor does it seem that Hahn was able to achieve anything with the Allies. On the contrary, he had to fight afterwards that the new Max Planck Society was allowed to exist at all. In fact, OOr) Hahn was allowed to further expand the Max Planck Society in the end, thus saving the principle of independent scientific institutes, which had originated in Kaiser Wilhelm's times and outlasted Weimar and the Third Reich, for post-war Germany. No victorious power wanted or could do without the technical expertise of the German scientists who had been looted. For this reason, scientific-technical capability was the first question to be asked. The principle of legitimation through utility was applied. This meant that the individual hunt commandos of >Operation Paperclip< had received the clear instruction: "If they are anti-Nazis without scientific rank: drop them. If Germans are of importance for our purposes, their political past does not matter." And when concerns were raised in the U.S. Senate in 1946 about the "importation of German scientists who had belonged to the NSDAP," a Pentagon spokesman replied, "Scholars are wont to be interested exclusively in their work and hardly in politics. Their joining the NSDAP was a mere formality." But this applied only to people whom the victors needed; countless others who were urgently needed by the German economy lost their livelihoods for years to come. For Control Council Directive No. 24 of January 12, 1946, prescribed the "immediate removal of former National Socialists" from all offices and from numerous professions (!). Accordingly, for example, in the American zone alone, 373,762 persons had been found "unsuitable" for any public function or work in the economy except as manual laborers by the end of 1946. The aim was clear, as English Congressman L. D. Gammans wrote in a letter to the editor in The Times on October 12, 1946: "Since under Hitler no one could retain an important position in industry, commerce, or administration who did not join the Party, the result we get in the denazification policy is that Germany is kept going, as it were, by a >third team< whose incompetence must eventually plunge the people into despair." Of course, word had gotten around among the German scientists and technicians
chosen by the Allies. Thus, none of them could lack cooperation and their loyalty to their new employers, fearing that the Allies were aware of everything that had happened before May 8, 1945. This also explains why these people often worked willingly for the new masters on meager salaries for the first few years, although for many of them the hope certainly remained that they would be able to build a secure future for themselves in the new countries if they performed well. In March 1946, the Americans replaced their >Overcast< project with >Paperclip<, which was better suited to the new conditions after the war. This name is now synonymous with the transfer of >German living knowledge< to the USA. It is interesting what happened to the German scientists in the USA after the end of the active >skimming method<. Since they had merely gone to the U.S. as guests of the U.S. military, bypassing immigration laws, their return to Germany would have been possible. However, Americans recognized that these people continued to be of use to the country and that their return to Germany was too dangerous for the United States. In the end, 90 percent of them remained in the United States more or less voluntarily and became American citizens. What is striking is how many of these people continued to be instrumental in U.S. technological development. Colonel Montie Cone, an associate of the JIOA chief, Bosquet Wey, once said, when asked why all these >bad< scientists were brought to the U.S., "From a military standpoint, we knew these people were invaluable to us. We just think of what we got from their research: all our satellites, jet planes, missiles, and almost everything else." The great understatement or how many German specialists really worked for the USA? It is still claimed that only about 500 to 600 German specialists were brought to America. This number must be corrected upward considerably. As with so many things, this came to light by chance. On January 11,

1999, then U.S. President Cunton established the >Interagency Working Group< (IWG). The IWG is a division of NARA and should strive to declassify and release all still secret American documents on "war criminals" (by definition, of course, only people from Japan and Germany). The IWG's directorate includes representatives from the CIA, FBI, OSD, NSC, and State Department to carefully control that only laundered information comes out. Nevertheless, information has already come to light during this process that is a minor sensation. For example, the IWG already announced on its WebSite the personal dossiers of over 1500 German specialists, technicians and engineers who were brought to the United States on the >Paperclip< project and similar undertakings. IWG/NARA hereby confirmed flawlessly that the actual number of scientists brought to America is many times larger than officially admitted so far. In the declassified section alone, more than 1500 names have now suddenly appeared. It can be assumed that the final number is even larger when the sensitive, unreleased documents are added. Experts on the subject from England, who wish to remain unnamed, speak of up to 5000 German >paperclippers< in the USA.1 How many other German specialists in Allied hands actually disappeared never to be seen again will probably never be published. Were they unwilling to cooperate, were they trying to deceive their >new employers, or was their knowledge simply too dangerous? People with knowledge of the German nuclear program seemed to be particularly at risk here, as shown by the example of Captain Falke, who was taken into American captivity with the submarine U 234 after the end of the war.

Although still initially prominent in interrogation reports, he subsequently disappeared without a trace, so that his death must be assumed.